

College of San Mateo
Official Course Outline

1. COURSE ID: FIRE 714 **TITLE:** Wildland Fire Control

Units: 3.0 units **Hours/Semester:** 48.0-54.0 Lecture hours; and 96.0-108.0 Homework hours

Method of Grading: Letter Grade Only

Recommended Preparation:

Eligibility for ENGL 100, or ENGL 105. FIRE 715

2. COURSE DESIGNATION:

Degree Credit

Transfer credit: CSU

3. COURSE DESCRIPTIONS:

Catalog Description:

This course focuses on the principles and techniques used to extinguish wildland fires, as well as prevention and control of their occurrences. Discussion points will include California's wildland fire problem, safety, weather effects, wildland fuels, fire behavior, attack methods, urban-interfaces and investigation.

4. STUDENT LEARNING OUTCOME(S) (SLO'S):

Upon successful completion of this course, a student will meet the following outcomes:

1. Explain the unique nature of wildland fires relating to fuels, topography, weather, and fire behavior
2. Discuss the various approaches to prevent, control, and extinguish wildland fires
3. Describe the specific safety considerations connected with wildland firefighting
4. Discuss the factors affecting wildland firefighting given the recognized tactics employed to extinguish wildland fires and promote personnel safety issues

5. SPECIFIC INSTRUCTIONAL OBJECTIVES:

Upon successful completion of this course, a student will be able to:

1. Explain the unique nature of wildland fires relating to fuels, topography, weather, and fire behavior
2. Discuss the various approaches to prevent, control, and extinguish wildland fires
3. Describe the specific safety considerations connected with wildland firefighting
4. Discuss the factors affecting wildland firefighting given the recognized tactics employed to extinguish wildland fires and promote personnel safety issues

6. COURSE CONTENT:

Lecture Content:

1. Introduction
 - A. Fire control history
 - B. Wildland values
 - C. California's wildland fire problem
2. Organizations and Resources
 - A. Organizations for fire control
 - B. California's Mutual Aid Program
3. Prevention
 - A. Fire prevention codes and their enforcement
 - B. Fire prevention planning
 - C. Fire laws in California
4. Tactics
 - A. Pre-Suppression planning
 - B. Fire control methods
 - C. Fire control operations
5. Suppression
 - A. The suppression organization
 - B. Ground attack equipment
 - C. Fire control operations
 - D. Handline construction
 - E. Backfiring operations

- F. Air operations
- 6. Detection
 - A. Detection and communications
 - B. Tools and support equipment
 - C. Maps and reconnaissance
- 7. Fire Behavior in Wildland Areas
 - A. Fire chemistry
 - B. Fire behavior
 - a. Fuels
 - b. Topography
 - c. Weather
 - C. Fire classifications
 - D. Fire danger rating system
- 8. Safety
 - A. Personal Protective Equipment (PPE)
 - B. Fireline safety
 - C. Survival
- 9. Urban-Interface
 - A. Urban-interface firefighting
 - B. Structure protection
 - C. Water supply utilization
 - D. Off-road operations
- 10. Investigation
 - A. Scene and evidence preservation
 - B. Fire cause determination

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Activity
- C. Discussion

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

Essay analysis of case studies

Reading Assignments:

Pre-reading for class session

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Exams/Tests
- B. Oral Presentation
- C. Papers
- D. Quizzes

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Teie, W., C.. *Firefighter's Handbook on Wildland Firefighting*, 4th ed. IFSTA, 2018

Origination Date: August 2020

Curriculum Committee Approval Date: October 2020

Effective Term: Fall 2021

Course Originator: Michelle Schneider