



El Camino College
COURSE OUTLINE OF RECORD – Official

Subject:	FTEC
Course Number:	171
Descriptive Title:	Wildland Firefighter Safety and Survival
Division:	Health Sciences and Athletics
Department:	Fire and Emergency Technology
Course Disciplines:	Fire Technology
Catalog Description:	This course provides students with information and presentations to understand basic wildland firefighter safety and survival principles. This course is about the evolution of wildland firefighting safety. The course follows what firefighters have learned about the behavior of fire and themselves in the wildlands over the last hundred years. The focus is how the risk of injury and death has been and will be managed in the expanding urban-wildland and rural North America.
Prerequisite:	
Co-requisite:	
Recommended Preparation:	English C1000 or C1000H
Enrollment Limitation:	
Hours Lecture (per week):	3
Hours Laboratory (per week):	0
Outside Study Hours:	6
Total Course Hours:	54
Course Units:	3
Grading Method:	Letter Grade only
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	
Transfer UC:	No
Effective Date:	
General Education ECC:	
Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	

Other:	
CalGETC:	
Term:	
Other:	
Student Learning Outcomes:	Upon completion of this course, students will be able to: 1. Describe Lookouts, Communications, Escape Routes, and Safety Zones (LCES) and how this tool is used by wildland firefighters to adhere to safety while engaging in firefighting activities. 2. Identify the Standard Firefighting Orders and explain how they are put into place on a Fireline. 3. Explain the 18 Situations that shout "Watch Out" during wildland firefighting operations.
Course Objectives:	1. Describe occupational safety hazards with wildland firefighting. 2. Explain the 18 WATCHOUT situations. 3. Identify the seven environmental factors. 4. Explain the indicators of hazardous conditions in wildland firefighting. 5. Describe how to use the hazards indicators when implementing the Risk Management Process. 6. Explain strategy and tactics that are required to maintain safe operations. 7. Describe the differences between safety and deployment zones. 8. Describe the procedures for deploy a fire shelter. 9. Describe cases of near misses, entrapments, and fatalities. 10. Describe common denominators of near misses, entrapments, and fatalities.
Major Topics:	I. Lookouts, Communications, Escape Routes, Safety Zones (Lecture, 4 Hours) A. Fire Behavior Terminology and Principles B. Fire Tactics and Strategy C. Combining Weather, Fuels, and Topography D. Wildland Fire Environment Triangle II. Standard Firefighting Orders (Lecture, 6 Hours) A. Briefing Fire Crews B. Fire Weather Stands C. Organization Control Standards D. Communication Standards E. Fighting Fire Aggressively F. Providing After Action Reviews III. Watch Out Situations (Lecture, 6 Hours) A. Size up B. Fuels C. Weather D. Topography E. Lookouts

	F. Communications G. Escape Routes H. Safety Zones IV. Mann Gulch Fire (Lecture, 8 Hours) A. Historic Fire Orientation B. Firefighter Stands and Orders C. Stand Firefighting Orders D. Watch Out Situations E. LCES F. After Action Review V. Loop Fire (Lecture, 8 Hours) A. Historic Fire Orientation B. Firefighter Stands and Orders C. Stand Firefighting Orders D. Watch Out Situations E. LCES F. After Action Review VI. South Canyon Fire (Lecture, 8 Hours) A. Historic Fire Orientation B. Firefighter Stands and Orders C. Stand Firefighting Orders D. Watch Out Situations E. LCES F. After Action Review VII. Yarnell Hill Fire (Lecture, 8 Hours) A. Historic Fire Orientation B. Firefighter Stands and Orders C. Stand Firefighting Orders D. Watch Out Situations E. LCES F. After Action Review VIII. Last Resort Survival (Lecture, 6 Hours) A. Training and Procedures B. Mental Preparedness C. Line Spike Operations D. Fire Shelter Deployment Sites E. Escape Routes F. Safety Zones
Total Lecture Hours:	54
Total Laboratory Hours:	0

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A.1. Primary Methods of Evaluation (Part 1 - CCN courses only):	
Primary Method of Evaluation:	1) Substantial writing assignments
Typical Assignment Using Primary Method of Evaluation:	Describe the events that occurred during the Mann Gulch Fire and what lessons were learned from the incident.
Critical Thinking Assignment 1:	Utilizing the Standard Firefighting Orders to identify hazardous situations in the wildland fire environment, describe the steps that should be taken to ensure firefighter safety during engagement.
Critical Thinking Assignment 2:	Describe how Lookouts, Communications, Escape Routes, and Safety Zones are used on a Fireline. Explain how to implement this safety tool on the Fireline using the Briefing Checklist and Sizeup Report.
Other Evaluation Methods:	Completion, Embedded Questions, Essay Exams, Homework Problems, Matching Items, Multiple Choice, Quizzes, Reading Reports, Term or Other Papers, True/False, Written Homework
If Other:	
Instructional Methods:	Discussion, Group Activities, Guest Speakers, Lecture, Multimedia presentations, Role play/simulation
If other:	
Work Outside of Class:	Answer questions, Required reading, Study
If Other:	
Up-To-Date Representative Texts:	Leading in the Wildland Fire Service, United States Department of Agriculture (USDA) Forest Service (FS), National Wildfire Coordinating Group (NWCG) NFES 2889 PMS 494-2, 2007. (Discipline Standard) (Most current document currently used with active and certified federal wildland firefighters in the United States.)
Alternative Texts:	N/A
Required Supplementary Readings:	N/A
Other Required Materials:	N/A
Requisite	
Category	
Requisite course:	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold	

the requisite skill(s). if applicable	
Requisite course:	ENGL C1000 or C1000H
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	Reading and Composition ENGL C1000 - Read and apply critical thinking skills to numerous published articles and to college-level, book-length works for the purpose of writing and discussion. ENGL C1000 - Compose coherent, multi-paragraph, thesis driven essays with logical and appropriate supporting ideas, including intext citations.
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). if applicable	
Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Ryan Carey
Date:	2/1/2025
Original Board Approval Date:	11/18/2025
Effective Term:	FA 2026