

# FIRE 010: WILDLAND FIRE TECHNOLOGY

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**Cross listed as:**

NR 010

**Originator**

asventura

**Justification / Rationale**

CIM updates that didn't cross over from CNet &amp; Text book update.

**Effective Term**

Fall 2020

**Credit Status**

Credit - Degree Applicable

**Subject**

FIRE - Fire Technology

**Course Number**

010

**Full Course Title**

Wildland Fire Technology

**Short Title**

WILDLAND FIRE TECH

**Cross Listed Course**

NR 010

**CIP Code**

03.0101

**TOP Code**

011500 - Natural Resources

**SAM Code**

D - Possibly Occupational

**Course Control Number**

CCC000400624

**Discipline****Disciplines List**

Fire Technology

Forestry/Natural Resources (Range management; soil, air and water resources; fish/wildlife management; parks and recreation)

**Modality**

Face-to-Face

**Catalog Description**

This course is designed to provide students with a fundamental knowledge of the factors affecting wildland fire behavior, fire prevention, and the wildland fire suppression techniques. Wildland fire behavior safety is presented throughout the course.

**Schedule Description**

This course is designed to provide students with a fundamental knowledge of the factors affecting wildland fire behavior, fire prevention and the wildland fire suppression techniques. Wildland fire behavior safety is presented throughout the course.

Advisory: ENG 061

**Lecture Units**

3

**Lecture Semester Hours**

54

**Lab Units**

0

**In-class Hours**

54

**Out-of-class Hours**

108

**Total Course Units**

3

**Total Semester Hours**

162

**Prerequisite Course(s)**

Advisory: ENG 061

**Required Text and Other Instructional Materials****Resource Type**

Book

**Author**

Teie, William C.

**Title**

Firefighter's Handbook on Wildland Firefighting, Strategy, Tactics, and Safety

**Edition**

4th

**City**

Stillwater, Oklahoma

**Publisher**

Fire Protection Publications

**Year**

2018

**College Level**

Yes

**ISBN #**

9780879396763

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**Class Size Maximum**

30

**Entrance Skills**

Write organized summaries and responses to readings.

**Requisite Course Objectives**

ENG 061-Use theses to organize paragraphs into coherent analyses.

**Entrance Skills**

Conduct research and evaluate sources for use as evidence in essays on complex topics.

**Requisite Course Objectives**

ENG 061-Demonstrate the ability to think critically and express ideas using various patterns of development.

ENG 061-Demonstrate the ability to use research skills including library resources such as books, periodicals, electronic databases and online resources such as the internet.

**Course Content**

- a. Unit 1
  - i. History of fire fighting
  - ii. Fire Physics: Fire behavior, fuels, weather, topography, prevention, education
- b. Unit 2
  - i. Suppression: Fireline safety, fire shelters, fire standards, 18 Watch Out situations
  - ii. Fireline construction and safety
  - iii. Mop-up techniques and safety
- c. Unit 3
  - i. Fire tools: tool and apparatus safety and maintenance, crosscut and chain saws
  - ii. Safety, operation, techniques and maintenance
- d. Unit 4
  - i. Air operations
  - ii. Helicopter procedures and safety
  - iii. Fixed wing aircraft procedures and safety
- e. Unit 5
  - i. Regulations
  - ii. ICS
  - iii. Chain of Command
  - iv. Sexual harassment
- f. Unit 6
  - i. Visit wildland fire stations and learn about conduct, field performance, hose lays and line construction
  - ii. Use of power equipment

**Course Objectives**

	Objectives
Objective 1	Understand the factors that influence wildland fire behavior and compare alternative actions, including their influences on fire behavior.
Objective 2	Distinguish between the fire standards and the "18" situations that shout, "Watch Out," and correctly evaluate possible consequences of their violation of fire behavior principles.
Objective 3	Identify wildland hand tools, chain saws, and other firefighting equipment, along with the standard procedures to follow when operating around bulldozers, helicopters, and fixed wing aircraft.
Objective 4	Evaluate the Incident Command system organizational structure and chain-of-command in emergency situations, and relate to their role in overall contest of wildland fire suppression.
Objective 5	Identify and evaluate situations that might lead to violations of State and Federal laws pertaining to sexual harassment and civil rights, and identify the consequences of such violations.

**Student Learning Outcomes**

	Upon satisfactory completion of this course, students will be able to:
Outcome 1	Discuss the causes of wildland firefighter injuries.
Outcome 2	Identify the firefighting assests used to control wildland fires.
Outcome 3	Describe historical wildland fire events that have occurred in the United States.

**Methods of Instruction**

Method	Please provide a description or examples of how each instructional method will be used in this course.
Discussion	Students will be expected to participate in respectful and healthy classroom discussions aimed at improving fellow-student learning.
Technology-based instruction	In order to supplement textbook information during lectures, reference to open-source news articles, academic publications, and media/video presentations will be utilized.
Participation	Students will be expected to participate in respectful and healthy classroom discussions aimed at improving fellow-student learning.
Lecture	The instructor will present a lecture every week to the students. This lecture will include a PowerPoint presentation derived from information in the selected textbook.
Collaborative/Team	Review case studies of wildland incidents and discuss safety lessons learned.

**Methods of Evaluation**

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Student participation/contribution	Review case studies of wildland incidents and discuss safety lessons learned. Students to present in groups their observations and possible fire line safety violations.	In Class Only
Mid-term and final evaluations	There will be a weekly written quiz covering the week's assigned chapter(s). Quiz material will come directly from the assigned textbook, and will be in the form of True/False, Multiple Choice, Fill in the Blank, Essay, or any combination of the aforementioned.	In Class Only
Tests/Quizzes/Examinations	There will be a weekly written quiz covering the week's assigned chapter(s). Quiz material will come directly from the assigned textbook, and will be in the form of True/False, Multiple Choice, Fill in the Blank, Essay, or any combination of the aforementioned.	In and Out of Class
Reading reports	Before the start of every class, students are required to complete all necessary assignments and have read the assigned chapter(s). Proper classroom preparation will prepare the student to enter into an academic environment and participate in classroom activities and discussions.	In and Out of Class
Term or research papers	Research paper to discuss historical wildland fires in the United States. Students will discuss dollar loss, impacts on communities, injuries, life loss and lessons learned.	Out of Class Only
Written homework	Complete required weekly workbook assignments.	Out of Class Only
Oral and practical examination	Students will be assigned one of the 10 Firefighting Standing Orders or 18 Situations that Shout Watch Out to present in class.	In Class Only

**Assignments**
**Other In-class Assignments**

1. Oral presentation in class on the 18 Situations that Shout Watch Out
2. Participation
3. Observation
4. Group discussion on the 10 Standard Firefighting Orders

5. Watch videos and discuss the life safety concerns presented
6. Reading of handouts and student manual

**Other Out-of-class Assignments**

1. Reading textbook assignments 20-25 pages per week
2. Research case studies and prepare for classroom group discussions
3. Reading assigned materials including weekly workbook assignments
4. Research field application of skills presented in class and exercises
5. Memorize 10 Standard Firefighting Orders
6. Memorize 18 Situations that Shout Watch Out
7. Read one chapter per week include 25-30 pages weekly week
8. Complete the review questions.
9. Submit completed assignment at the beginning of the first class meeting each week.
10. Critical Thinking
  - a. Review cases histories of incidents where firefighters were trapped, injured, or died as a result of improper safety practices. Identify new trends in safety equipment and training program to enhance firefighter safety.

**Grade Methods**

Letter Grade Only

**Comparable Transfer Course Information****University System**

CSU

**Campus**

CSU Los Angeles

**Course Title**

Wildland Fire Control

**Catalog Year**

2013-14

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**MIS Course Data****CIP Code**

43.0206 - Wildland/Forest Firefighting and Investigation.

**TOP Code**

213310 - Wildland Fire Technology

**SAM Code**

D - Possibly Occupational

**Basic Skills Status**

Not Basic Skills

**Prior College Level**

Not applicable

**Cooperative Work Experience**

Not a Coop Course

**Course Classification Status**

Credit Course

**Approved Special Class**

Not special class

**Noncredit Category**

Not Applicable, Credit Course

**Funding Agency Category**

Not Applicable

**Program Status**

Program Applicable

**Transfer Status**

Transferable to CSU only

**Allow Audit**

No

**Repeatability**

No

**Materials Fee**

No

**Additional Fees?**

No

**Approvals****Curriculum Committee Approval Date**

12/03/2019

**Academic Senate Approval Date**

12/12/2019

**Board of Trustees Approval Date**

1/17/2020

**Course Control Number**

CCC000056795

**Programs referencing this course**

Fire Technology Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined?key=146/>)

Field Ranger Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined?key=151/>)

Geographic Information Systems Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined?key=315/>)

Field Ranger Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined?key=151/>)

Natural Resources AS Degree (transfer preparation) (<http://catalog.collegeofthedesert.eduundefined?key=71/>)