

# **COCONINO COMMUNITY COLLEGE**

## **COURSE OUTLINE**

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Status: Permanent

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A. Identification:

1. Subject Area: Fire Science
2. Course Number: FSC 233
3. Course Title: Introduction to Wildland Fire Behavior/Fire Fighter and Human Factors in the Wildland (S-130, S-190, L-180, I-100, IS 700).
4. Credit Hrs: 4
5. Catalog Description:  
Provide a fundamental knowledge of wildland fire: behavior, control techniques, and fireline leadership, along with an introduction to the Incident Command System and National Response Network. Covers material from, IS-100,, IS-700, S-130, S-190, and L-180 After completion, students may qualify for "Red Card" with the addition of fire service employment and successful completion of the Fire Fighter Pack Test Four lecture.

B. Course Goals:

To provide the students with a basic understanding of wildland fire behavior, suppression, and leadership. Course also designed to introduce the incident command system, national response network and increase chance for successful employment as wildland fire fighter.

C. Course Outcomes:

Students will be able to:

1. List the five major organizational activities within the Incident Command System (ICS) and explain their function.
2. Give the titles, and explain the duties of Command and General Staff members.
3. Match organizational units to appropriate operations, planning, logistics, and admin/finance sections.
4. Match supervisory titles with appropriate levels within the organization.
5. Describe the terms used to name major incident facilities, and state their functions.
6. Describe what an Incident Action Plan (IAP) is and how it is used in an incident.
7. Describe how span of control functions within the incident organization and the use of resources.
8. Describe the common responsibilities associated with the incident or event assignments.
9. Describe several applications for the use of ICS.
10. Describe the need for proper incident resource management.
11. Describe three ways of managing resources and the advantages of each.
12. Explain the purpose of resource typing.
13. Describe the three resource status conditions used at an incident, and the purpose and limits of each.
14. Explain how resource status is changed, how notification of changes is made, and how status is maintained at an incident or event.
15. List various kinds of resources which may be encountered in incidents in which the student is or may become involved.
16. Identify and discuss the three sides of the fire triangle.
17. Identify the environmental factors of fuel, weather, and topography that affect the start and spread of wildland fire.
18. Describe the contributing factors that indicate the potential for increased fire behavior that may compromise safety.

19. Explain what the Lookouts, Communication, Escape routes, and Safety zones (LCES) system is and how it relates to the standard firefighting orders.
- 20.. Construct a fire-line to required standards using various methods.
- 21.. Strengthen, reinforce, and use holding actions on a fire-line.
- 22.. Extinguish the fire with or without the use of water.
23. Complete tasks in a safe and efficient manner.
24. Given an assignment in a wildland environment, describe factors in that environment which could impact safety.
25. Demonstrate an understanding of the responsibility to address human performance issues in order to integrate more effectively into crews/teams operating in high-risk, dynamic work environments.
26. Describe the intent of National Incident Management System (NIMS)
27. Describe the key concepts and principals underlying NIMS.
28. Describe the purpose of the NIMS components including: preparedness, communication and information management, resource management, and command and management.
29. Describe the purpose of the National Integration Center.

D. Course Assessment:

Assessment tools include written cognitive tests and skills practicum as approved by the Federal Emergency Management Agency (FEMA) for IS-100 and IS-700 and National Wildfire Coordinating Group (NWCG) for S-130, S-190, and L-180.

E. Course Content:

Will include:

Items identified by the National Wildfire Coordinating Group (NWCG) from courses: IS-100, IS-700, S-130, S-190, L-180 in addition to field activity days.