

Lassen Community College Course Outline

FS-23 – Firing Operations (S-219)

1.0 Units

I. Catalog Description

This course introduces the roles and responsibilities of a firing boss, common firing devices, and general firing operations and techniques. Although comprehensive in nature, the coursework is not a substitute for the dynamic fire environment.

Prerequisite(s): FS 75 (S-290) Fire behavior]

Recommended: Qualified as a firefighter type 2 ([FFT2](#))

Recommended Preparation: Successful completion of ENGL105 or equivalent multiple measures placement.

Transfers to CSU only

20 Hours Lecture, 40 hours outside study: 60 Total Student Learning Hours

Scheduled: Spring (even)

Or upon request

II. Coding Information

Repeatability: Not Repeatable

Grading Option: Graded only

Credit Type: Credit - Degree Applicable

TOP Code: 213300

III. Course Objectives

A. Course Student Learning Outcomes

Upon successful completion of this course, the student will:

1. Describe the roles and responsibilities of the Single Resource Boss-Firing/Prescribed Fire Ignition Specialist.
2. Identify resources needed to successfully conduct an ignition operation for a wildland fire or prescribed fire.
3. Develop an ignition plan demonstrating the knowledge of fire behavior, firing techniques, holding, and hazards.
4. Given a scenario, implement an ignition operation with emphasis on safety, coordination, communications, and evaluation.

B. Course Objectives

Upon successful completion of this course, the student will:

1. Describe the role and responsibility of the firing boss for planning execution, safety, training and coordination of a burning operation on an incident.
2. Describe commonly used firing devices; their characteristics, applications, safety and transportation requirements, maintenance needs and availability.
3. Be able to develop a firing plan demonstrating the knowledge of fire spread, firing techniques, hazards and resource needs.
4. Describe the purpose and elements of an on-going or post-firing evolution.

IV. Course Content

A. Duties and Responsibilities

1. Describe where the firing boss fits into the ICS organization.
 2. Describe the topics covered in a crew briefing.
 3. List the elements to look for in a pre-firing reconnaissance
 4. List five (5) safety and welfare considerations that may be involved in a firing operation.
 5. List three (3) equipment related responsibilities of the firing boss
 6. List four (4) factors that may influence crew assignments.
 7. Describe the training responsibilities of the firing boss.
 8. List three (3) ways of communicating within a crew.
 9. List the incident personnel that a firing boss should coordinate with or obtain information from in order to meet firing plan objections.
- B. Firing Equipment
1. Describe the characteristics and operation of the various firing devices.
 2. Describe which firing device would be most appropriate for a given fuel type condition.
 3. Identify the maintenance problems related to the various firing devices.
 4. Identify the proper procedures for transportation and storage of the various firing devices.
- C. Firing Methods
1. Identify the primary uses of firing operations
 2. Describe the three (3) types of fire spread.
 3. Describe the hazards associated with head, backing and flankfires.
 4. Identify problems that might adversely affect the firing operation.
 5. List considerations for determining the number of personnel and type and amount of equipment needed for a firing operation.
 6. Identify the importance of regulating the heat from the firing operation.
- D. Evaluation
1. Identify four (4) elements that might affect an on-going firing operation requiring the firing boss to make adjustments to his/her firing operation.
 2. Identify the purpose(s) for critiquing a completed firing operation
 3. List five (5) elements that should be considered when critiquing a completed firing operation.

V. Assignments

- A. Appropriate Readings**(Assigned text and handout material):
Fireline Handbook - NWCG Handbook 3, PMS 410-1, NFES #0065
- B. Writing Assignments**
(Completion of assigned materials, short papers and in class projects): Quizzes and log of daily activities
- C. Expected Outside Assignments**
(Required for all degree-applicable courses; need two hours outside for every one hour in class, none required for all lab classes): Maintain log of daily activities.
- D. Specific Assignments that Demonstrate Critical Thinking**
(Required for all degree applicable courses): Identify and critique four elements that might affect an on-going firing operation requiring the firing boss to make adjustments to his/her firing operation.

VI. Methods of Evaluation

- Traditional Evaluation**
Quizzes and final exam.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

Traditional Classroom Delivery Correspondence Delivery

Hybrid Delivery

Online Delivery

Traditional Classroom Delivery

Lecture, discussion, audio/visual aids, demonstration, group exercises, guest speakers, lab, individualized programs and other as needed.

VIII. Representative Texts and Supplies

NWCG Student workbook: provided by instructor

Fireline handbook – NWCG Handbook 3, PMS 410-1, 2022 edition (Provided)

IX. Discipline/s Assignment

Fire Technology

X. Course Status

Current Status: Active

Original Approval Date: 1/17/2012

Revised By: Chad Lawson

Latest Curriculum/Academic Standards Committee Revision Date: 10/04/2022