

Lassen Community College Course Outline

FS-89- Wildland Fire Chainsaws (S-212)

1 Units

I. Catalog Description

This course provides an introduction to the function, maintenance and use of internal combustion engine powered chainsaws and their tactical wildland fire application. Field exercises support entry level training for firefighters with little or no previous experience in operating a chain saw, providing hands-on cutting experience in surroundings similar to fireline situations. **Work boots and gloves are required and shall be provided by the students.** Students may provide their own nomex PPE and helmet, if not available, LCC can provide helmets and work shirts. Repeatable as needed for certification.

Prerequisite(s): FS-61 Basic Firefighter Training (Basic 32) or FS 60A or equivalent

20 Hours Lecture, 8 Hours Lab, 40 hours out of class hours, 68 total hours of instruction

Scheduled: Spring/Fall

II. Coding Information

Repeatability: Not repeatable – Take 1 time

Grading Option: Graded

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 be able to:

1. Troubleshoot and correct the problems of an inoperable chain saw.
2. Demonstrate the ability to safely and properly operate a chainsaw in different situations/scenarios in a team environment.
3. Demonstrate the tactical application of chainsaws in brushing, limbing, bucking, and falling for fireline construction and mop-up operations.

B. Course Objectives

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

1. List, define, and apply chainsaw safety standards as required by OSHA and NWCG member agency manuals, handbooks, and directives.
2. Incorporate the approved use, maintenance, and function of personal protective equipment in wildland fire chainsaw applications.
3. Identify basic chainsaw parts' nomenclature, maintenance, tuning, troubleshooting, and safety feathers.
4. Demonstrate field maintenance tasks required for chainsaw operation
5. Demonstrate the tactical application of chainsaws in brushing, limbing, bucking, and falling for fireline construction and mop-up operations.

IV. Course Content

A. Unit 1 – Safety Requirements

1. Describe the elements of a Job Hazard Analysis required for chainsaw operations.
 2. Define the personal protective equipment required for chainsaw operations.
 3. Apply the safety components of the Situational Awareness-Individual Complexity Checklist.
- B. Unit 2 – Chainsaw Maintenance and Operation
1. Identify basic chainsaw parts' nomenclature, maintenance, tuning, troubleshooting and safety feathers.
 2. Demonstrate field maintenance tasks required for chainsaw operation.
 3. Demonstrate chainsaw starting and handling procedures.
 4. Demonstrate the use of tools that support field chainsaw operations.
- C. Unit 3 – Chainsaw Tasks and Techniques
1. Define the components required to complete a thorough hazard assessment for bucking, liming, brushing, and falling operations.
 2. Define types of binds and bucking methods.
 3. Introduce the procedural approach to liming, brushing and slashing, bucking, and felling.
- D. Unit 4 – Fire line Construction and Mop-Up
1. Demonstrate the tactical application of chainsaws in fire line construction and mop-up operations.
 2. Define the duties and responsibilities of the chainsaw operator and the swamper.
 3. List four methods of saw team development for fire line tactical strategy.
 4. Define tactics for coordinating multiple saw teams.
- E. Unit 5 – Field Proficiency
1. Demonstrate competence in safely liming, brushing, bucking and falling in least complex situations.

V. Assignments

- A. Appropriate Readings
Students are expected to read the assigned workbook and hand out materials.
- B. Writing Assignments
Students will be expected to document assignment procedures and use of chainsaw.
- C. Expected Outside Assignments
During field trip, student will be expected to apply chainsaw use skills as instructed in classroom.
- D. Specific Assignments that Demonstrate Critical Thinking
Students will be required to examine, critique and review critical areas relevant to the responsibilities of the assigned power saw user.

VI. Methods of Evaluation

- A. Subjective by the instructor based on participation
- B. Unit Quizzes
- C. Field Exercises (Skills Assessment)

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

1. Lecture
2. Demonstration
3. Field trips

VIII. Representative Texts and Supplies

NWCG S-212 student workbook, 2012 (LCC Provided)
NWCG Incident Response Pocket Guide (IRPG) 2022

Supplies: Chainsaw will be provided for use and problem solving.

IX. Discipline/s Assignment

Fire Technology

X. Course Status

Current Status: Active

Original Approval Date: 12/04/2012

Revised By: Dan Weaver

Latest Curriculum/Academic Standards Committee Revision Date: 05/16/2023