



S-212: Wildland Fire Chainsaws (2025) Course Plan

Course Details

Description:	This is an instructor-led course intended to be presented at the local level. The course lessons provide 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 chainsaw, providing hands-on cutting experience in surroundings similar to fireline situations.
Designed For:	Individuals desiring to be qualified as Incident Commander Type 5 (ICT5), Felling Boss, Single Resource (FELB), or completed SFT Firefighter 2 training.
Authority:	National Wildfire Coordinating Group (NWCG)
Prerequisites:	Completed SFT Firefighter 1 training. Satisfactory completion of pre-course work.
Standard:	N/A
Hours:	24-36 hours
Maximum Class Size:	40 (24 Recommended by NWCG)
Instructor Level:	Registered Instructor
Instructor/Student Ratio:	1:40 Lecture (NWCG Recommends 24) 1:10 Application or Field Training (NWCG recommends 1:6)
Restrictions:	Limited to Instructor-Led Delivery only.
SFT Designation:	FSTEP

Required Resources

SFT Curriculum Box: <https://calfire.box.com/v/SFTCourseMaterialsBoxS212>

Online Instructor Resources

The following instructor resources are required and are available online at

- Course Manual
 - [NWCG Standards for Wildland Fire Chainsaws Operations, PMS 212, March 2025](#)

Student Resources

To participate in this course, students need:

- Pre-Course Work Assignment
 - [Pre-Course Glossary of Terms](#)
 - [NWCG YouTube Channel Video: Fuel Geysering Predictable](#)
- Student Workbook
 - [2012 S-212 Student Workbook](#)

Facilities, Equipment, and Personnel

The following facilities, equipment, or personnel are required to deliver this course:

Facilities

- Standard classroom equipped for up to 40 students
- Whiteboards or easel pads with appropriate writing implements
- Projector/TV with appropriate laptop connections
- Wifi/Internet access

Equipment

Student safety is of paramount importance when conducting the type of high-risk training associated with Wildland Fire Chainsaws.

- The student is responsible for providing their PPE and ensuring that all PPE meets AHJ and site requirements.
- For all power tools, hand tools, equipment and operating supplies, ensure that you have an adequate amount to support a safe and active learning environment.
- Appropriate chainsaw operating PPE is defined by NFPA 1977 5.7 and detailed by [Specification 6170-4K, Chaps Chain Saw M-2020](#).

Personnel

The following personnel are required to deliver this course:

- Any instructor counted toward student ratios, including application components, must be an SFT Registered S-212 Wildfire Chainsaws Instructor.

- SFT strongly recommends the use of Skills Coaches as supplemental support to assist with application and skills proficiency practice.

The use of Skills Coaches as supplemental support does not negate the 1:10 instructor/student ratio requirement.

Time Table

Segment			Unit Total
Unit 0: Introduction			1.0
Unit 1: Safety Requirements			2.0
Unit 2: Chainsaw Parts, Maintenance, and Operation			4.0
Unit 3: Fireline Construction and Mop Up			1.5
Unit 4A: Chainsaw Tasks and Techniques			2
Unit 4B: Chainsaw Tasks and Techniques			4.5
Unit 4C: Chainsaw Tasks and Technique			3.0
Unit 4D: Chainsaw Tasks and Techniques			5.5
Field Time			8
Close Out			1.0
Course Totals			24-36

Time Table Key

1. The Time Table documents the amount of time required to deliver the content included in the course plan.
2. Time is documented using the quarter system: 15 min. = .25 / 30 min. = .50 / 45 min. = .75 / 60 min. = 1.0.
3. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.
4. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled and the acquired structure selected for training. The Application time documented is based on the maximum class size identified in the Course Details section.
5. Summative Assessments are determined and scheduled by the authority having jurisdiction. These are not the written or psychomotor State Fire Training certification exams. These are in-class assessments to evaluate student progress and calculate course grades.

Objectives

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1. Define and apply chainsaw safety standards as required by OSHA and agency handbooks, manuals, directives, and owner's manuals.
2. Identify and demonstrate basic chainsaw operation, troubleshooting, maintenance, and safety features.
3. Demonstrate the tactical application of chainsaws in fireline construction and mop up operations.