

# Course Syllabus

**Department:** Conservation

**Date:** September 24, 2012

## I. Course Prefix and Number: WFS 130

**Course Name:** Wildland Fire Suppression (S-130/S-190)

**Credit Hours and Contact Hours:** 2 credit hours and 2 contact hours

**Catalog Description including pre- and co-requisites:** *supporting data required for grade prerequisite of 'C' or higher.*

This course provides the training necessary for the Federal Interagency "RED" Card for wildland firefighter. Topics covered include: ignition, behavior, and spread of wildfires; the role of topography and fuels in wildfires; prescribed fires as a management tool; use of fire suppression equipment; methods of fire prevention and suppression; State and Federal wildland fire control agencies. Graded on a satisfactory/unsatisfactory basis. (Also listed as CON 255.)

## Relationship to Academic Programs and Curriculum including SUNY Gen Ed designation if applicable:

This course is required for the Wildland Fire Suppression Certificate. This course can be used to complete elective credit for students in all CON majors of the Department or general elective credit for students in other degree programs.

**II. Course Student Learning Outcomes:** *State the student learning outcome(s) for the course (e.g. Student will be able to identify...)*

Students will:

S-190:

1. Identify and discuss the three sides of the fire triangle. (professional competency)
2. Identify the environmental factors of fuels, weather and topography that affect the start and spread of wildland fire. (professional competency)
3. Describe the contributing factors that indicate the potential for increased fire behavior that may compromise safety. (professional competency, critical thinking, oral communications)

S-130:

1. Explain what the LCES (Lookouts, Communications, Escape Routes, and Safety Zones) system is and how it relates to the Standard Firefighting Orders. (professional competency)

2. Construct a fireline to required standards using various methods. (professional competency)
3. Strengthen, reinforce, and use holding actions on a fireline. (professional competency)
4. Extinguish the fire with or without the use of water. (professional competency)
5. Complete assigned tasks in a safe and efficient manner. (professional competency)
6. Given an assignment in a wildfire environment, describe factors in that environment which could impact safety. (professional competency, oral communications)

**College Learning Outcomes Addressed by the Course:** *(check each College Learning Outcome addressed by the Student Learning Outcomes)*

- |                                      |  |
|--------------------------------------|--|
| <input type="checkbox"/> writing     | <input type="checkbox"/> computer literacy     |
| X oral communications                | <input type="checkbox"/> ethics/values         |
| <input type="checkbox"/> reading     | <input type="checkbox"/> citizenship           |
| <input type="checkbox"/> mathematics | <input type="checkbox"/> global concerns       |
| X critical thinking                  | <input type="checkbox"/> information resources |

**III. Assessment Measures (Summarize how the college and student learning outcomes will be assessed):** *For each identified outcome checked, please provide the specific assessment measure.*

Students take a written test, perform skills such as emergency shelter deployment and fire line creation and completion of a group project.

List identified College Learning Outcomes(s)	Specific assessment measure(s)
Oral Communications	In an oral presentation to the class, students, in a group setting, will describe factors in a wildfire setting that could impact safety.
Critical Thinking	Students must respond to a written scenario on an exam where they will be required to demonstrate their understanding of fire behavior and draw conclusions about that behavior and its relationship to safety on the fire line.

**IV. Instructional Materials and Methods**

### **Types of Course Materials:**

This course utilizes federal agency materials such as videos, books and PowerPoint presentations.

### **Methods of Instruction (e.g. Lecture, Lab, Seminar ...):**

Lecture, field experience, guest speakers, and hands-on practice of skills.

### **V. General Outline of Topics Covered:**

S-190 portion of the course covers:

Module 1: Basic Concepts of Wildland Fire

Module 2: Fuel, Topography, and Weather

Module 3: Fire Behavior

S-130 portion of the course covers:

Module 1: Preparedness, ICS, and Resources

Module 2: Watch Out and LCES

Module 3: Fire Shelter 10/10

Module 4: Potential Hazards and Human Factors on the Fireline

Module 5: Transportation Safety

Module 6: Hand Tools

Module 7: Firing Devices

Module 8: Water Use

Module 9: Suppression, Communication, and Mopup

Module 10: Hazardous Materials

Module 11: Wildland Urban Interface

Module 12: Optional Knowledge Areas

Module 13: Performance Day Requirements

7/12