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# FOR 3214L: FIRE ECOLOGY & MANAGEMENT LAB

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## SCHOOL OF FOREST RESOURCES & CONSERVATION UNIVERSITY OF FLORIDA SPRING 2019

### INSTRUCTORS

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**Credits:** 1

**Prerequisites:** FOR 3153C or PCB 3034C or PCB 4044C, or the equivalent

**Enrollment** in FOR3214 Lecture (2 credits) is *strongly encouraged*

**Class Hours:** Friday, periods 4-7 (10:40am-2:45pm), MCCB 3108

**Help Sessions:** By appointment



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## COURSE DESCRIPTION & LEARNING OBJECTIVES

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### Course Description

Detailed study of the role, occurrence and function of wildland fires in natural ecosystems and the use of prescribed burning to simulate those functions. Key topics include factors that influence natural fires, effects of fires on the environment, management and control of wildfires, and the use of prescribed burning. Students [in the lab section] will plan and conduct several prescribed burns.

### Course Learning Objectives:

At the end of this class, you should be able to:

- *Understand* basic wildland fire behavior and smoke management
- *Describe* fire as an ecological process, including effects on plants, animals, soil, water and air
- *Demonstrate* ability to safely participate in the execution of prescribed fires, including
  - Explain what the LCES system is and how it relates to the Standard Firefighting Orders
  - Construct a fireline to required standards using various methods
  - Strengthen, reinforce, and use holding actions on a fireline
  - Extinguish the fire with or without the use of water
  - Complete assigned tasks in a safe and efficient manner
  - Given an assignment in a wildfire environment, describe factors in that environment which could impact safety

## CLASS FORMAT & MAJOR ASSIGNMENTS

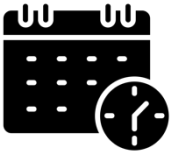
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**If we can burn, we will. ALWAYS CHECK YOUR EMAIL THURSDAY NIGHT! You will get an email before 8pm if we plan to burn. If you are not prepared to burn, you will not be able to participate and complete a written burn summary.**

When we are unable to burn, we will be completing the L-180: Human Factors in The Wildland Fire Service and S-130: Firefighter Type 2 Training courses. Completion of all five courses (see below) will give you the basics of the Firefighter Type 2 position.

**Points will be assigned for each lab! Additional details and grading rubrics will be provided on Canvas.**

Lab exercises and written summaries of prescribed fires (80%)



1. Inquiry-based lab exercises associated with L-180 and S-130 will be assigned when prescribed fires are not possible. These exercises will be short, but require students to reach conclusions through problems, scenarios, and case studies. **Due by end of lab period unless otherwise announced.**

### Topics covered include:

Firefighter preparedness	Suppression and mop up
Incident Command Center overview	Patrolling
Resource types	Radio communications
Watch out situations	Wildland-urban interface safety
Fire orders	Fire shelters
LCES, a safety planning concept	Hand tools
Hazards and human factors	Fire apps and new technology
Transportation safety	Hazardous materials
Evaluation of incident reports	Planning a prescribed fire

2. Written summary for each fire will include copy of executed burn plans, analyses of lessons learned, and documentation of activities and outcomes from prescribed burns. **Due by 5pm the Thursday before the following lab.**

Completion of online coursework (20%) Due February 15; must bring proof of completion to class




1. The [S-190: Introduction to Wildland Fire Behavior](#) online course (6-8 hours of training)
2. The [FEMA IS-100: Introduction to the Incident Command System](#) online course (2-4 hours of training)
3. The [IS-700: an introduction to the National Incident Management System](#) online course (4-5 hours of training)

**NOTE:** Those students who have completed the Basic Firefighter Type 2 training will instead complete S131: Firefighter Type 1.

### Required lab materials

1. Materials and Supplies Fee
2. S-130 Firefighter Training Workbook (provided in lab)
3. For prescribed burns, you will need at least two large bottles of water, snacks, 6 inch or higher leather boots (preferably with Vibram soles), long pants, cotton shirt, and bandana or similar smoke barrier (optional). All clothing should be 100% cotton. Nomex shirts and pants, all-leather gloves, safety glasses, and hard hats will be provided at fires. Bring your own if you prefer.



## Policy on Attendance & Late Work

To earn credit for lab exercises and written summaries, you must be present in class. If you have reason to miss a class, you must contact your instructor **PRIOR** to the class. Acceptable excuses are determined at your instructor's discretion.

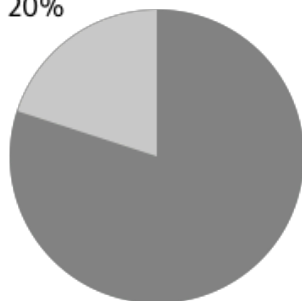
Class policy is that no credit is given for assignments turned in after deadline.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policy and can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

## EVALUATION OF STUDENT PERFORMANCE

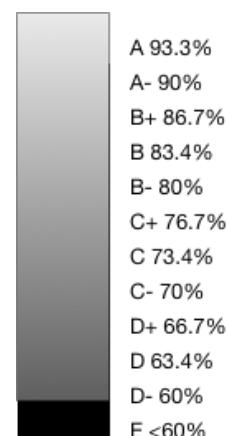
Completion of online coursework

20%



Lab exercises and written summaries of burns

80%



For information on current UF policies for assigning grade points, see: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

## RESOURCES TO HELP YOU SUCCEED

### Course Website

The course website can be accessed on Canvas using your myUFL key. The course site will contain readings, announcements, helpful links, and important course information, as well as an online grade book.

### Software use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

### Academic Civility

Meaningful and constructive dialogue is encouraged in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view. Respect for individual differences and alternative viewpoints will be maintained in this class. One's words and use of language should be temperate and within acceptable bounds of civility and decency. Friendly persuasion wins friends and influences people. Aggressively arguing your point often does the opposite and stops dialogue.

## **Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

## **Wellness**

UF Counseling and Wellness Center offers individual counseling, wellness counseling, couples counseling, problem solving help, CERC crisis services, and other assistance. For more information, visit: <http://www.counseling.ufl.edu/cwc/Default.aspx>

## **Students with Disabilities Act**

The Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

## **Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)*
- *U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)*
- *Career Resource Center, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)*

## **Student Complaints**

Residential Course: [https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf)

## **Feedback**

Student assessment of instruction is an important part of efforts to improve teaching and learning. We encourage your constructive criticism, suggestions, ideas, and other feedback for improving the course. Please refer to contact information on the first page.

Additionally, at the end of the semester, students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.