Course Overview
Fire is an important component of ecosystems worldwide. In this course, we will explore the concept of the fire regime, plant and animal adaptations to fire regimes, fire history methods, community and ecosystem responses to fire, and current issues in fire management.

Course Goals and Objectives
At the end of this course, you will be able to do the following:

1. Understand and predict qualitatively the interactions among topography, weather, fuels, and fire behavior
2. Recognize in plants and animals morphological, behavioral, and life history adaptations to fire, and predict qualitatively the tolerance of any given species to fire
3. Understand the basic approaches for determining fire histories and fire regimes -- their methodologies, appropriate applications, and limitations
4. Describe the characteristic fire regimes, past, present, and future, of several major types of ecosystems in North America and the world
5. Understand the basic science, philosophical context, and historical origins of current issues and controversies in fire management policy from an ecological perspective

Course Prerequisites
One course in Ecology (eg LIFE 320 or LAND 220/LIFE 220)
**Course Structure**
Classroom sessions will combine lecture, discussion, and other activities. This will be an interactive class, and you are expected to participate by asking questions, sharing your ideas, and working on in-class exercises. Sharing of personal views and experiences can greatly enhance the classroom environment, and will be rewarded.

**Required Texts and Materials**
We will use the USFS “Rainbow Series” on Fire Effects as background text for this class. The chapters are freely available online [http://depts.washington.edu/nwfire/project.php?projectID=358], and hard copies can be ordered free if desired. These and other required readings will be posted as PDFs on Canvas.

**Important Dates to Remember**
This course schedule is tentative. Please check course calendar on Canvas regularly for updates and additions.

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<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tr>
<td>Jan 20</td>
<td>Introduction: Combustion, fire regimes</td>
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<td>Jan 22</td>
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<td>Jan 27</td>
<td>Influence of weather, fuels, &amp; topography on heat release in fire</td>
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<td>Feb 3</td>
<td>Fire effects on plants &amp; vegetation</td>
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<td>Feb 10</td>
<td>Evolution of Fire Adaptations and Flammability</td>
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<td>Feb 17</td>
<td>Vegetation communities and landscape dynamics</td>
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<td>Feb 24</td>
<td>Fire effects on soils, nutrients</td>
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<td>Feb 26</td>
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<td>Mar 3</td>
<td>Fire effects on hydrology and erosion</td>
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<td>Mar 5</td>
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**Course Schedule and/or Schedule of Assignments**
This course schedule is tentative. Please check Course Calendar on Canvas regularly for updates and additions. Reading assignments also posted on Course Calendar.
Essay and Project Assignments
There will be several in-class and take-home exercises assigned during the semester. These are designed to help reinforce concepts from class and readings. Late assignments will NOT be accepted, but your lowest score will be dropped.

Research Paper: You will choose a noteworthy historical fire that interests you, and write a research report on the circumstances of the fire and its ecological impact. More detail about the assignment will be provided early in the semester. In addition to the written paper, you are expected to make a well-prepared presentation to the class, either a poster or a video (details TBA). These presentations to your colleagues will comprise the last week of the course.

Basis for Final Grade
Your final course grade will be based on three hour-long exams (2 x 18% = 36%), a final exam (25%), a library research paper and presentation (20%), occasional in-class and take-home exercises (14%), and class participation (5%).

Your participation grade will be based on attendance and active participation. Attendance will be taken at random 10-12 times during the semester. Each absence after two “free” absences results in a 1% (out of 5%) reduction in your participation grade. Frequent and thoughtful active participation can boost your participation grade by a percentage point or two.

Extra credit is available for students who wish to attend a seminar or webinar on a wildland fire related topic. A write-up or short class presentation is required. See extra credit handout for more details. Also, up to half an extra credit point can be earned for visiting me in my office hours, or by appt, to talk (about anything).
Course Policies

Late Work Policy:
Late homework/exercise assignments will not be accepted, but your lowest score will be dropped. There are no make-ups for in-class exercises or exams, unless due to illness (with doctor’s note) or family emergency. Late final projects will be penalized by three percentage points for each day they are overdue, and will not be accepted later than one week following the due date. Make-ups associated with University-sanctioned extracurricular/co-curricular activities must be discussed with the instructor as early as possible, and not less than 1 week prior to the absence.

Grades of "Incomplete":
Per university policy, an instructor may assign temporary grade of Incomplete to a student who demonstrates that he or she could not complete the requirements of the course due to circumstances beyond the student's control and not reasonably foreseeable. A student must be passing a course at the time that an Incomplete is requested unless the instructor determines that there are extenuating circumstances to assign an Incomplete to a student who is not passing the course. When an instructor assigns an Incomplete, he or she shall specify in writing using the Department Incomplete Grade Form the requirements the student shall fulfill to complete the course as well as the reasons for granting an Incomplete when the student is not passing the course. The instructor shall retain a copy of this statement in his or her grade records and provide copies to the student and the department head or his or her designee. (Section I.6 of the Academic Faculty and Administrative Professional Manual)

Disability Access:
Colorado State University is committed to providing reasonable accommodations for all persons with disabilities. Students with disabilities who need accommodations must first contact Resources for Disabled Students before requesting accommodations from the professor. Resources for Disabled Students (RDS; http://rds.colostate.edu/home) is located in room 100 of the General Services Building. Their phone is (970) 491-6385 (V/TDD). Students who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations.

Attendance Policy:

Attendance
Students are expected to attend class and participate in in-class discussions and activities. Attendance will be taken at random 10-12 times during the semester. Each absence after two “free” absences results in a reduction in participation grade.

Religious Accommodation:
Participation in official University activities, e.g., an out-of-town athletic event, or special religious observances may provide a legitimate reason for an excused absence. The student is responsible for discussing this with the instructor at the beginning of the semester.

Final Exam Policy:
Final examination week is part of the regular semester. Student attendance shall be consistent with University policy.
If a student has three or more final examinations (not classes) scheduled for the same day or if conflicts of examination times occur, the student may negotiate a time change with the instructors involved. If the parties involved cannot find a mutually agreeable time, the Registrar’s Office indicates which courses must be changed. **Note:** The Registrar’s Office must be notified at least one week prior to Final Examination Week to allow instructors time to make appropriate accommodations. It is the student’s responsibility to initiate negotiations.

Any student who has a conflict with the examination schedule must inform the instructor as soon as possible before the examination. If an agreement cannot be reached between the instructor and student as to the appropriateness of a make-up examination the student should appeal to the department head. http://www.registrar.colostate.edu/final-exams

**Professionalism Policy:**
Per university policy and classroom etiquette; mobile phones, iPods, etc. **must be silenced** upon entering the classroom and placed out of sight. Those not heeding this rule will be asked to leave the classroom immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings. Students who habitually disturb the class by talking, arriving late, etc., and have been warned may suffer a reduction in their final class grade.

When emailing the instructor or TA, please include your full name and the course number in your email subject line. Please be respectful in your email requests (see http://www.wikihow.com/Email-a-Professor for examples) and allow a full business day for a response.

**Academic Integrity:**
The Department of Forest and Rangeland Stewardship takes academic integrity seriously. At minimum, academic integrity means that no one will use another's work as their own. The CSU writing center defines plagiarism this way:

> Plagiarism is the unauthorized or unacknowledged use of another person's academic or scholarly work. Done on purpose, it is cheating. Done accidentally, it is no less serious. Regardless of how it occurs, plagiarism is a theft of intellectual property and a violation of an ironclad rule demanding "credit be given where credit is due."


If you plagiarize in your work you could lose credit for the plagiarized work, fail the assignment, or fail the course. Each instance of plagiarism, classroom cheating, and other types of academic dishonesty will be addressed according to the principles published in the CSU General Catalog (see page seven, column two: http://www.catalog.colostate.edu/FrontPDF/1.6POLICIES1112f.pdf).

Of course, academic integrity means more than just avoiding plagiarism. It also involves doing your own reading and studying. It includes regular class attendance, careful consideration of all class materials, and engagement with the class and your fellow students. Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, we will ask to you sign the CSU Honor Pledge as part of completing all of our major assignments. While you will not be required to sign the honor pledge, we will ask each of you to write and sign the following statement on your papers and exams: "I have not given, received, or used any unauthorized assistance."
Extra credit opportunities for F324

I encourage all of you to take advantage of the variety of fire experts and seminar opportunities we have here at CSU. For those of you who would like to do a little extra work in order to gain extra credit, here is the deal.

1. You will attend a lecture/seminar (or webinar) on a wildland fire topic. I will try to announce these as I hear about them. If you hear of a local event that I’ve missed, please let me know so I can announce it.

2. You must approve with me your intention to take advantage of an extra credit opportunity before you attend the seminar. This is so I can plan to avoid duplication in class presentations (see item 3b below).

3. You may choose between the following two options for extra credit:
   a. a 1 page written report about the seminar you attended
   OR
   b. a 5 minute presentation to the class about the seminar

4. For both a and b, include the following items in your report/presentation:
   a. What were one or two main points that the speaker was trying to communicate?
   b. What kinds of evidence were presented to support the speaker’s points? Was the evidence convincing, or do you have some criticisms?
   c. What did you like and/or not like about the speaker’s presentation style (stage presence, use of visual aids, speaking style, etc)?
   d. Did you ask a question at the seminar? If yes, what was the question and the answer? (Kudos to those of you bold enough to ask a question!)
   e. Anything else that you found interesting.

5. Extra credit is not automatic! Your paper or presentation must be insightful and well-presented. Good efforts will receive points worth up to 1% of your grade (this can bump you up a grade if you are borderline). Exceptional efforts might be considered for up to 2% of your grade, but this would be rare.

6. Maximum of 2 seminars per person.

Feel free to direct any questions my way.