WILD 3100: INTRODUCTION TO WILDLAND FIRE

Course Description
This course provides an introduction to wildland fire. Fire plays a critical ecological role in forests, grasslands, and other systems, and it is also something land managers and societies grapple with in different ways around the world. In this course you will be introduced to the basics of fire, including the combustion process. We will learn about how terrain, weather, and fuels influence how fires start, spread, and go out. We will also cover an introduction to fire ecology, the relationship between fire and its environment. We will study fire management strategies, including fire suppression and prescribed burning. Finally, we will talk about fire management policy and current issues in fire science and management. Throughout the course, examples from both local systems and from around the globe will be used to illustrate concepts.

Fees
No fees are required for this course.

Course Objectives
By the end of this course, you will have:

1. Gained a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories) (IDEA Objective #1)
   - An understanding of the basic physical and chemical attributes of fire, including combustion
   - Knowledge of how terrain, weather, and fuels affect fire behavior

2. Developed specific skills, competencies, and points of view needed by professionals in the field most closely related to this course. (IDEA Objective #4)
   - Knowledge of fire’s different effects on various ecosystems
   - An understanding of techniques used to suppress, ignite, and manage fires
   - An understanding of the complexity of fire and fuel management in the wildland urban interface

3. Developed skills in expressing oneself orally or in writing (IDEA Objective #8)
   - Writing assignments
   - Presentation to the class

Instructor
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Teaching Assistant
Alex Howe
Office: NR 235B
Email: alex.howe@usu.edu
Office hours: Any time, by appointment

Course Resources
Course Policies

Late work policy

All assignments are due on the designated dates. You may submit assignments up to 3 days past the due date, but you will lose 10% of the available points per day. If you have circumstances that prevent you from turning assignments in on time, please contact me.

Technology policy

Please help maintain an environment conducive for learning by not using cell phones or other technology for non-learning purposes during class time. Maintaining a distraction-limited environment is important for learning, and trying to multitask negatively affects you and your classmates.

Statement on plagiarism and cheating:

I take academic integrity very seriously, and ask that you do too. Plagiarism and cheating will not be tolerated. Any instance will result in failure of the assignment and depending on the circumstances, failure in the course. If you have questions about this, please contact me before you turn in an assignment and I will help you to successfully complete the assignments.

Course Work

Readings

The readings for the class are selected to give you important background information on each topic, and will complement the material covered in lectures. The readings are not optional, and material from the readings will be included on quizzes and the final exam.

Quizzes (75 points)

Students will take weekly quizzes throughout the semester. Content from both the readings and lectures will appear on quizzes. There will be 15 quizzes, worth 5 points each. Quizzes are due by the end of the weekend (11:59 p.m. Sundays) and may not be taken late.

Attendance (15 points)

Students should be present for class. However, please stay away if you are sick! If you let me know ahead of time that you will not be present due to sickness or some other reason (i.e. attending a conference), I will not penalize you for missing class.

Homework (120 points)

There will be 7 homework assignments assigned during the semester, each worth 20 points.

Fire Case Study Presentation (30 points)

In pairs, students will give presentations on one noteworthy fire each. One student will present on the background (e.g. location, size, weather conditions) and management taken (e.g. people and equipment, incident command), while the other student will present fire ecology (e.g., vegetation type, severity, post-fire effects) of the fire, noteworthy aspects of the fire, and what lessons were learned as a result of the fire. Coordination between students is essential, but each student will be graded separately. Photos and maps presented in PowerPoint are required.

Midterm (40 points)

A midterm exam will be given that tests students on material from the first half of the semester. Questions will be drawn from lectures, assigned readings, and student presentations. The exam will take place during class.

Final Exam (75 points)

A comprehensive final exam will include material from the lectures, assigned readings, and student presentations.
Grade Scheme

The following grading standards will be used in this class:

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<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>100 % to 93.0%</td>
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<tr>
<td>A-</td>
<td>&lt; 93.0 % to 90.0%</td>
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<tr>
<td>B+</td>
<td>&lt; 90.0 % to 87.0%</td>
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<tr>
<td>B</td>
<td>&lt; 87.0 % to 83.0%</td>
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<tr>
<td>B-</td>
<td>&lt; 83.0 % to 80.0%</td>
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<tr>
<td>C+</td>
<td>&lt; 80.0 % to 77.0%</td>
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<tr>
<td>C</td>
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<tr>
<td>C-</td>
<td>&lt; 73.0 % to 70.0%</td>
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<tr>
<td>D+</td>
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<td>D</td>
<td>&lt; 67.0 % to 60.0%</td>
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<td>F</td>
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Disability Statement

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) (http://www.usu.edu/drc/) as early in the semester as possible (University Inn # 101, (435) 797-2444, drc@usu.edu (mailto:drc@usu.edu)). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

COVID-19 Classroom Safety Protocols

While not mandated, USU encourages and welcomes the wearing of masks in all university buildings, especially within 6 feet of others. Furthermore, it is strongly encouraged to take measures to mitigate risk as recommended by federal and state public health officials. These measures include getting fully vaccinated, staying home if you are sick (even with mild symptoms), and maintaining good hygiene including frequent hand washing. Testing will be provided, without charge, throughout the semester and the USU COVID Webpage (https://www.usu.edu/covid-19/) will provide up-to-date information. Please remember; COVID can have significant impact on the health and safety of those around you so remain vigilant and respectful.