

Wildfire Science and the Urban Interface
California State University, San Marcos

Course Outline

FIRE 499

Senior Experience in Wildfire Science

Capstone experience and participation in independent library or laboratory research projects on wildfires and/or the urban interface. *Prerequisite 489 and instructor consent.*

COURSE DESCRIPTION

In consultation with the instructor, students identify a topic for library or applied research on wildfires and/or the urban interface. Students have the option of conducting either a literature review, providing an in-depth reading and researching of the literature on current issues. Student must produce a paper with supporting citations that summarizes the current state of knowledge on the topic, and any conclusions or recommendations as appropriate. Students can also conduct an original research project in the laboratory or field, developed in collaboration with the instructor and/or faculty member. Student will produce a paper or poster with supporting citations and critical analysis.

The goal of the degree in Wildfire Science and the Urban Interface is to provide students with a rigorous and broad foundation in those sciences and fields most relevant to fire-related issues. Students are prepared to understand and contribute to a broad range of confronting society.

As a culminating experience in the program, you will be expected to apply your cumulative knowledge and understanding of the field on a broad range of relevant issues. You are expected to critically review an gaining hands-on experience designed as part of the FIRE 489 course, and approved by the instructor, in cooperation with participating faculty or agency affiliates. Students will be expected to present information on their experiences to the class during an online forum.

REQUIRED MATERIALS

We will use continue using text books and resources from previous courses, especially in research design and statistics.

Supplemental readings relevant to student projects may be provided throughout the semester, either uploaded to the course website, provided by a link to online materials, and/or emailed directly to students.

COURSE WEBSITE

This course is a fully-online course. As such, we will rely on the Cougar Courses course management software for all course interactions, materials, and discussions. Recorded lectures, course notes, and supplemental readings will all be found there. There will also be an online forum for discussion boards and group conversations. Once you have successfully enrolled in the class you will have access to the course website at: **<http://cc.csusm.edu>**. Log in with your email user name and the same password as your email account.

GRADING POLICY

Students will begin the semester having identified a topic for their independent study (from FIRE 489). This will serve as the foundation for the student's independent study experience and final report and presentation.

Your grade will be based on performance in discussions, class participation, and a final project report. This course is graded on a Credit/No Credit basis. In order to receive credit for the course, students will have to complete all material, and demonstrate an understanding and knowledge equivalent to a C grade in the course. This course does not use particular numerical scores that must be achieved to receive credit.

Passing the course is largely based on the successful completion of the final project and oral and written materials. We encourage you to keep up with the course pace, and develop virtual discussion groups with other members of the class. Discussion and interaction can be an important part of understanding the topic. Please be sure to contact the instructor early on if you are having any difficulty in the course.

Participation: Topics discussed in this course may be unfamiliar, albeit extremely important for your development as scientists and wildfire/WUI professionals. Regardless of whether you could conceivably pass the class without participating with the instructor or other students, every student learns more if he or she actively engages with the material, which you cannot do if you don't participate. Therefore, participation is mandatory, with students attending online forums and discussions along with real-time discussion as appropriate.

Final Project:

In consultation with the instructor, students will conduct independent research on a topic for library or applied research on wildfires and/or the wildland urban interface (WUI).
OPTION A: Literature Review: In-depth reading and researching of the literature on current issues in wildland fire/WUI. Student must produce a paper with supporting citations that summarizes the current state of knowledge on the topic.
OPTION B: Original research project in the developed in collaboration with the instructor or faculty member.

A goal of the final paper/proposal is to assess the student's cumulative theoretical and applied interdisciplinary knowledge, providing an opportunity to apply this knowledge to through critical thinking, analysis, and the scientific method. *Please note: Final project will be due during week .*

CLASS POLICIES

Getting help: Students often struggle with various concepts, particularly during the early stages of a class. If you are having difficulty, there are several ways to get help:

- Come to virtual office hours. In addition to my posted office hours, you are welcome to set up a meeting by appointment. Office hours are greatly under-used by students at this campus, don't be shy about making use of them!

Email notification: If I need to e-mail announcements about the class, I will use your CSUSM account. If you do not regularly monitor your CSUSM e-mail, please set up a forward from your campus e-mail to whatever account you regularly use.

Academic dishonesty: Academic misconduct has rarely been a problem, and warning you about the consequences may seem unnecessary and perhaps even offensive. The University takes standards of integrity very seriously. We are very strict with regard to cheating and plagiarism, and will respond accordingly. Please review the information on students' rights and responsibilities

Any work you submit for grading must represent your own thinking, and must be in your own words. Any cheating or plagiarism that is detected will be reported to the Dean of Students. You are expected to know what plagiarism is – refer to <https://microsites.csusm.edu/plagiarism-tutorial/> for a tutorial on plagiarism (including “unintentional” plagiarism) and how to avoid them. The instructor reserves the right to apply appropriate penalties for cases of academic dishonesty detected, up to and including assigning an F for the class. All cases of academic dishonesty will be reported to the Dean of Students.

Making up missed work: This class involves a great deal of online interaction and work. As a fully online course, the internet becomes the virtual classroom. It is critically important that students put in the time to attend discussion sessions (as appropriate), and review all course materials.

Disabled student services: Students with disabilities who require academic accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disabled Student Services (DSS). This office is located in Craven Hall 4300, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Students authorized by DSS to receive accommodations should meet with me during my virtual office hours or in a more private setting in order to ensure your privacy.

All-University writing requirement: As a three unit course, each student will complete a rigorous series of written assessments that will encompass at least 2,500 words (approximately 10 pages). The student will be responsible for original work, ideas, and concepts, ensuring that all written materials submitted are of the highest quality and standard. Assessment of this material will cover spelling and grammar, content, clarity, and organization. Evaluations will also address critical thinking skills, problem solving, and original thought.

LEARNING OUTCOMES

After taking this course you should be able to:

- Apply basic concepts from previous courses in their major to broad issues in the environment
- Demonstrate an ability to understand, research, and evaluate a problem or issue
- Evaluate projects and reports for their scientific and statistical rigor
- Demonstrate the ability to discuss and evaluate fire-related issues both verbally and written
- Apply experiences from courses and work to real-world situations
- Demonstrate the ability to discuss and evaluate issues both verbally and written and apply perspectives, concepts, and theories related to societal problems, threats, risks, and safety impacts

RECOMMENDATIONS FOR STUDENT SUCCESS

You will find that the content in this class is familiar to you, but can certainly be challenging. However, the coursework will reinforce the principles of the scientific process, critical thinking, and problem solving. Students who are successful in this class are those that employ the following practices.

- Dedicate yourself to learning the course material – read and review.
- Never let yourself get behind on the materials or assignments.
- Use the help that is offered (instructor office hours, review sessions, and discussion boards).
- Work in study groups. Or study alone. But whatever you do, study!

CLASS SCHEDULE

TO BE DETERMINED