F524 Forest Fire Meteorology and Behavior

F524 is a graduate course examining concepts important to the understanding of fire meteorology and behavior. The material presented in the course will provide technical information necessary for managing fire in wildlands. The course will also offer students the opportunity to better understand and explore the use of fire modeling in research applications.

The objectives of the course are:

1. To provide an understanding of fire modeling concepts important to real-time fire behavior prediction, fire danger rating, and land management planning.
2. To improve problem-solving capabilities in fire behavior, fire weather, and incident management.
3. To develop an appreciation for the uses and limitations of models in fire management planning and decision-making.
4. To foster awareness of issues related to the incorporation of meteorological information in fire management.

The course is designed to be flexible to cover topics that are of interests to the students.

The course consists of 1) a weekly lecture and/or discussion seminar (T 2:00-3:40) and 2) a laboratory session in the computer lab (TH 2:00-3:40). Laboratory sessions will demonstrate fire management software and approaches to problem solving. Assignments will consist of lab reports/problem sets, examinations, and an individual project. The individual project will allow each student to pursue a topic of personal interest, and will involve submitting a written report and taking primary responsibility for leading a class discussion on the chosen topic.

Course grading will consist of assignments, oral discussions, and exams weighted as follows:

- Lab reports and problems: 25%
- Oral Participation: 10%
- Project: 30%
- Exams: 35%
- TOTAL: 100%

There is no assigned text for this course; readings will be assigned from the primary literature and available as e-reserves.

Instructor Info:
Monique Rocca
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OH: W 1:00-2:30pm or by appointment