Jan. 16—Introduction
Jan. 16, 18, 23, 25, 30—Fire Behavior
  • Fire behavior, fuels, fuel models, time lag, fire weather
  • Surface and crown fires
  • In class work on example problems, discussion of Pagami Creek fire video
Feb. 1, 6, 8, 13—Fire and plant/tree population responses
  • Plant and tree response to fire, individual, population and evolutionary responses, adaptations and life history characteristics, serotiny, tree mortality in fires
  • In class work on example problems
  • Readings, Beverly and Martell 2003, Sieg et al. 2006, Michaletz and Johnson 2007
Feb. 15—Prescribed fire
  • Foss Lake Fire discussion, reading Foss Lake Fire Escaped Prescribed Fire
  • Short lecture and group discussion on prescribed fire in Itasca State Park. Reading, Frissell 1973
Feb 20, 22, 27—Other disturbances
March 1—No class. Lee at boreal forest symposium in Edmonton
March 6—Review for exam I
March 8—Exam I
March 20—Wildlife and fire
  • Habitat suitability and in class work to start assignment #3
March 22—Changing disturbance regimes/workday for small group projects
  • Class discussion of Guyette et al. 2002 and Johnstone et al. 2016
March 27, 29—Stand and landscape disturbance history
  • Stand history from tree rings and fire scars, in class group work
  • Landscape age distributions
April 3—Fire suppression in Ontario; fragmentation and fire
April 5—Wildland-urban interfaces (WUI)
April 10, 12—Minnesota disturbance regimes
  • Oak savanna review of webinar and BWCAW lecture
  • Readings: Heinselman 1973, McEwan et al 2011
April 17, 19, 24, 26—Project presentations
May 1—Review for exam II
May 3—Exam II
Assignments:
1. Crown and surface fire. Due Feb 6
2. Tree mortality. Due Feb 20
3. Habitat suitability for wildlife and disturbance. Due March 27
4. Group project report to class. Students work in small groups on a project to present in during the latter part of the semester. Details will be given out during the semester.

Course information
Attendance is expected. Past experience shows that people who attend class regularly get good grades. There is no text book for the course. I have selected a number of items from a wide array of sources for reading and handout materials. There is no one book that brings all of these subjects together. Therefore, it is important to pay attention to the powerpoints, handouts, and readings—the syllabus lists required readings which are in a folder in Moodle.

GRADING AND POLICY ON LATE WORK: Assignments are generally due in class in hard copy form on the due date. E-mail submission may be allowed for certain assignments and for extenuating circumstances. Items turned in late may be penalized (by 10% of points, 20% if more than a week late) unless you have a good excuse (see Expectations of Students below). Because presentations will take more than one class period for all groups to present, due dates will obviously vary by a few days (and please, no complaints if your group is assigned one of the earlier dates). The same grade will be assigned to all group members.

The course will be graded on a curve (separate ones for undergraduate and graduate students), with 600 total points. Usually, scores within 10% of the total possible score in the class will get an A or A-, the next 10% a B or B-, etc.

There will be two exams worth about 100 points each, and 3 assignments worth 150 points, and group presentation 100 points, for a total of 450. Grading is based on the percentage of total points, in 10% steps for each grade. For example, if the total possible score if 450, then scores of 405-450 would be A or A-. Graduate students and undergraduate students (FNRM5203 versus FNRM3203) are graded separately, and do not compete with each other.

Office hours: generally after class (10:00-12:00) on Tuesday and Thursday, and by appointment, and there will be extra office hours before exams.

Course Format
The course will use a number of learning formats, including lectures, full class participation, small group discussions, and presentations. Students will be expected to participate in class discussions and small group exercises, and be respectful of all views and perspectives presented.
**Expectations of Students**
To meet the course requirements of a three-credit class, students are expected to attend and participate in three hours per week of class lecture and discussion. In addition, students should spend an additional six hours per week on coursework outside the classroom reading and reviewing course materials and preparing assignments to meet course requirements. Class and readings will be the primary sources of information for this course. Any student with a documented disability condition who needs to arrange reasonable accommodations should bring this to the attention of the instructor and the Disability Services Office (230 Gateway Building) at the beginning of the semester.

**Examination Policy**
Each of the two exams will be given only once during the regular class session. If a student has a legitimate, unavoidable conflict (such as unexpected illness or documented personal emergencies), they need to make arrangements with the instructor for taking a make-up exam prior to the scheduled examination time.

**Academic Dishonesty**
Academic dishonesty in any portion of the academic work for the course shall be grounds for awarding a grade of F or N for the entire course. Academic dishonesty includes (but is not limited to): cheating on assignments or examinations; plagiarizing; submitting false records of academic achievement; submitting the same paper (or substantially similar papers) to meet the requirements of more than one course without the approval and consent of all instructors concerned; taking or using test materials without faculty permission; or interfering with another student's work.

**Student Mental Health and Stress Management**
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via [http://www.mentalhealth.umn.edu/](http://www.mentalhealth.umn.edu/).

**University of Minnesota Policy on Sexual Harassment**
Sexual harassment by or toward a member of the University community is prohibited.