Fire as a Tool for Landscape Designers, Planners and Managers

An intensive course in fire ecology and prescribed burning the week before the Fall 2007 quarter with observation of prescribed burns during fall term

LA 408/508 Fire Ecology and Management • Fall 2007 • 3-4 Credits • P/NP
Instructor: Bart Johnson • Department of Landscape Architecture
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The course will principally be held during the 0 week of fall quarter, and will require pre-class readings, assignments and a short paper on a topic of interest prior to the first class meeting.

Credits: 4 cr. for students participating in prescribed burn observations, 3 cr. for others

Prerequisite: Permission of instructor. Enrollment limited to 20 students. Selection criteria will include level of ecological background, academic level, and related interests and experience.

The course is targeted toward students from Landscape Architecture, Environmental Studies, Geography and Biology, and others involved in landscape design, planning and management.

Interested students should contact Chad Bush in the Landscape Architecture office or call 346-3634 to get on an initial sign-up list. Be sure to leave a phone number and email address.

All students who wish to enroll will be asked to fill out an information form to help select students for the class in the event that more than 20 wish to enroll. Forms are available in the Landscape office, 230 Lawrence Hall, or from Prof. Johnson over email.

COURSE GOALS

By the end of the course, students should:

• Be able to interpret historic, contemporary and emerging uses of fire as a land management tool in the context of both culture and ecology

• Understand the roles and effects of fire as a disturbance regime in ecological communities and be able to interpret fire history and status in a variety of PNW landscapes

• Have developed a working knowledge of the fundamentals of prescribed fire techniques, and be able to evaluate landscapes in terms of fuel physics and potential fire effects

• Have developed in-depth knowledge of prescribed fire for restoration in a selected PNW landscape through study and active participation in a prescribed fire
**Course Format**

**Preparation over the summer**
Students will be assigned readings from the class reader with summary worksheets due over the summer on a schedule arranged with the instructors and completed no later than the first day of class. The reader includes papers on natural history, cultural uses and issues, technical materials for burn prescriptions, a glossary of fire terminology, etc. The assigned topics include: 1) fire behavior; 2) vegetative effects; 3) prescribed fire behavior and effects; 4) soil effects; 5) hydrologic effects; 6) historic fire regimes; 7) philosophy and aesthetics of restoration; 8) flora and fauna effects of prescribed fire; 9) PNW prairie & savanna restoration; 10) health, ethics, and social effects; and 11) burn prescriptions.

Each student also will be responsible for researching a selected topic of interest, submitting a short paper the first day of class, and presenting their findings in student panel sessions.

**During zero week**
The course will be conducted the week of September 16-22, 2007 with daytime and potentially evening sessions. Classes will include:

- **Discussions, presentations, and technical training:**
  - Technical training in fire safety, prescribed fire techniques, fire suppression and fire effects monitoring
  - Discussions and presentations about readings and student topics, with periodic participation from ecologists, fire specialists and land managers
  - Heated sessions on the cultural, social and ecological significance of fire in the landscape

- **Field Trips:**
  - Visit multiple sites to discuss fire management goals and practices with land managers while examining fire dynamics, fire history and post-fire assessment in different landscape types

**During fall quarter**

**Participation in, or observation of, a prescribed burn**
If the weather and agency burn schedules coincide, there will be local prescribed burns during 0 week and otherwise during late September and early October. Most burns probably will be scheduled during the week. This will require students to adapt their schedules to participate in the burn, and is a course requirement for those signing up for 4 credits.

The level of class participation in a burn is contingent on negotiations with cooperating agencies. Potential sites include Finley Wildlife Refuge, Fern Ridge, and Mt. Pisgah and will involve oak savanna and/or upland and wetland prairie.

**Course Fee:** There will be a non-refundable course fee of $50 to cover class expenses.

**Grading:** Evaluation will be based on class attendance, assignments, preparation and participation. All assignments must be turned in on time and in a satisfactory manner for a passing grade.

**If you have a disability** or other health concern and anticipate the need for accommodations in this course, please contact Prof. Johnson as soon as possible. If this is a documented disability, please request that the Counselor for Students with Disabilities send a verification letter.