Instructors
Leda N. Kobziar, Assistant Professor
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208 Newins-Ziegler Hall
(352)-846-0901

Office hours: TBD

Class Hours: Friday, periods 3-4, 222 N-Z. Lab, periods 5-8 (together, 9:35 AM to 3:50 PM)

Objectives and Learning Outcomes
At the end of this course, each student will be able to:
• Explain the ecological aspects of fire and fire management techniques;
• Assess prescribed burning plans for a variety of ecosystems and goals;
• Relate present-day fire policies and use with historical precedents;
• Evaluate critical factors in fire behavior and effects on vegetation and wildlife;
• Describe wildland fire control administration and operations.
• Fulfill the requirements for Florida’s Certified Prescribed Burn Manager qualifications

Required Texts
No required text, but readings will be made available electronically. The FL Division of Forestry website has the readings for the Certified Prescribed Burn Manager training at: http://www.fl-dof.com/wildfire/rx_training.html.

Class Format, Make-up and Attendance Policies
Weekly lecture format with two topics typically covered each week, allowing some time for in-class discussions, group work, and presentations. Enrollment in Lab portion (1 credit) of this class is strongly encouraged. Make-up work for legitimate excuses will be evaluated on a case-by-case basis. Attendance will be taken into consideration when assigning the 10% of your grade associated with class participation. No make-up exams will be allowed unless arranged prior to the exams.

Evaluation of Student Performance

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Component</th>
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<tbody>
<tr>
<td>40%</td>
<td>Two unit exams (multiple choice, short answer, problems)</td>
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<tr>
<td>25%</td>
<td>Short reading assignments, Weekly Meteorologist</td>
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<tr>
<td>25%</td>
<td>Detailed burn plan</td>
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<tr>
<td>10%</td>
<td>Participation and attendance</td>
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Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A-</td>
<td>90-93.3%</td>
</tr>
<tr>
<td>A</td>
<td>93.4-96.6</td>
</tr>
<tr>
<td>96.7-100</td>
<td>A+</td>
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<tr>
<td>B-</td>
<td>80-83.3%</td>
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<tr>
<td>B</td>
<td>83.4-86.6</td>
</tr>
<tr>
<td>86.7-89.9</td>
<td>B+</td>
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<tr>
<td>C-</td>
<td>70-73.3%</td>
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<tr>
<td>C</td>
<td>73.4-76.6</td>
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<tr>
<td>76.7-79.9</td>
<td>C+</td>
</tr>
<tr>
<td>D-</td>
<td>60-63.3%</td>
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<tr>
<td>D</td>
<td>63.4-66.6</td>
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<tr>
<td>66.7-69.9</td>
<td>D+</td>
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<tr>
<td>E (Fail)</td>
<td>Less than 60%</td>
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Assignments

- Readings on a weekly basis pertaining to the week’s topic will be made available electronically. Students are expected to have completed the readings before class periods and will be called upon to comment on the readings.
- Weekly Meteorologist (see below)
- Readings-based assignments (2 reading responses) or In-class assignments TBA
- Short assignments contributing to the final Comprehensive Burn Plan
- A Comprehensive Burn Plan, including: smoke assessments, fire behavior analysis, fire weather prescriptions, contingency reports, monitoring protocols, quantification of risk in the wildland-urban interface, and public announcement and relations planning.

Weekly Meteorologist

Weather is perhaps the most important element a fire ecologist or scientist should be aware of at all times. As part of your preparation towards becoming a fire use practitioner, you will act as a meteorologist once or twice during the semester. At the beginning of class, you will give a general overview of the weather systems affecting North America, and weather pertinent to burning in Gainesville specifically. Your presentation is only 5-10 minutes, but should include the following:

- A ppt. or other image of North America showing major weather systems (fronts, etc.)
- A spot weather forecast for the ACMF, requested from the DOF the morning of class from: [http://www.fl-dof.com/fire_weather/index.html](http://www.fl-dof.com/fire_weather/index.html).
- One the same web page, check under “Local Fire Weather Products” for important information and local forecasts. Be sure to check for fire weather watches or red flag warnings!
- Based on the evidence, your opinion about why the day would be a good burn day or not

Schedule of Class Topics (Will be updated for 2012)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Subject</th>
<th>Assignment-Undergraduate</th>
<th>Assignment-Graduate</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Jan. 7</td>
<td>Orientation and Introduction: Fire in the southern US and why we burn (CPBM), Safety (CPBM) LAB: Rx Burning Safety and Tools</td>
<td>Skim CPBM chs. 1-2 Read CPBM ch. 7</td>
<td>Skim CPBM chs. 1-2 Read CPBM ch. 7</td>
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<td>Week 2</td>
<td>Jan. 14</td>
<td>Fire Weather (CPBM) LAB: Assessing fire weather and fuel loads</td>
<td>Read CPBM ch. 8</td>
<td>Read CPBM ch. 8 Read handout</td>
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<td>Week 3</td>
<td>Jan. 21</td>
<td>Firing Techniques (CPBM) LAB: Firing techniques exercises</td>
<td>Read CPBM chs. 10-13</td>
<td>Read CPBM chs. 10-13 Work on course project questions</td>
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| Week 4  | Jan. 28  | Fire Behavior (CPBM)  
LAB: Modeling systems for fire behavior prediction | Read CPBM ch. 11 | Read CPBM ch. 11  
*COURSE PROJECT Q's DUE |
|--------|---------|------------------------------------------------|-----------------|---------------------------------|
| Week 5 | Feb. 4  | Prescribed burn planning and evaluation (CPBM)  
Holding and contingencies/Managing the burn (CPBM)  
LAB: TBA | Read CPBM ch. 6 | Read CPBM ch. 6 |
| Week 6 | Feb. 11 | Smoke Management and ecological effects  
LAB: Predicting smoke movement and risk | Read CPBM ch. 9  
pgs. 3, 5-11  
Read handout, write response | Read CPBM ch. 9 pgs. 3, 5-11  
Read handout, write response |
| Week 7 | Feb. 18 | Fire and vegetation ecology  
Fire history and dendrochronology  
LAB: Dendrochronology-unlocking fire history | Read CPBM ch. 9  
pgs. 1-3  
*Reading response DUE  
Read handout | Read CPBM ch. 9 pgs. 1-3  
*Reading response DUE  
Read handout |
| Week 8 | Feb. 25 | Fire and water resources  
Wildlife response to fire  
LAB: Assessing ecological fire effects | Read handout  
Study for midterm | *PART 1 COURSE PROJECT DUE  
Read handout  
Study for midterm |
| Week 9 | Mar. 4  | Fire effects on soil chemistry and biology | | MIDTERM |
| Week 10| Mar. 11 | SPRING BREAK  
UG- Conclave (no class)/ G- course projects  
*LAB on your own: visit NATL for burn planning | Read CPBM chs. 3-4  
work on burn plan | Read CPBM chs. 3-4  
work on burn plan |
| Week 11| Mar. 18 | Legal issues in prescribed burning (CPBM)  
Public relations (CPBM)  
LAB: Visit with agency PR officer | Read “Rednecks” handout, write response  
Visit FIREWISE website | Read “Rednecks” handout, see FIREWISE website |
| Week 12| Mar. 25 | Wildland Urban Interface fire management  
LAB: Is your home safe? | *Reading response DUE | Read handout, write response |
| Week 13| Apr. 1  | Wildland fire management and suppression  
- Administrative structures and programs | Read handout | Read handout  
*Reading response DUE |
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<tr>
<th>Week 15</th>
<th>Apr. 15</th>
<th>Climate change and fire feedbacks</th>
<th>*PART 2 COURSE PROJECT DUE</th>
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<tr>
<td></td>
<td></td>
<td>LAB: TBA</td>
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<tr>
<th>Week 16</th>
<th>Apr. 22</th>
<th>No Class</th>
<th>*BURN PLANS DUE &amp; PART 3 COURSE PROJECT DUE</th>
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<tr>
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<td><strong>FINAL EXAM and CPBM EXAM:</strong> 12:30 PM</td>
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**Additional References**

**Web Sites:** Fire Effects Information System  
Fire Management Software  
FIREWISE  
Florida Division of Forestry (weather, drought index, etc)  
National Interagency Fire Center  
Tall Timbers Research Center  
USFS – Fire  
USFS – Southern Research Station, Interface South  
USFS –Forest Encyclopedia Network  
University of California Forest Products Lab

**Important Literature Sources:**
International Journal of Wildland Fire  
Fire Ecology (available on-line at http://www.fireecology.net/pages/13)  
Forest Ecology and Management  
Journal of Forestry  
Southern, Western, Northern Journals of Applied Forestry  
Proceedings of Tall Timbers Fire Ecology Conferences  
USDA Forest Service General Technical Reports, Research Notes, and Research Papers

**Supplemental Texts**
(Appropriate sections will be handed out or sent by email to students):

Other Information

**Academic Honesty:** In 1995 the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. By enrolling at the University, and in this course, you commit yourself to that standard. The honor code, in part, states “On all work submitted for credit by students at the university, the following pledge is either required or implied: ‘On my honor, I have neither given nor received unauthorized aid in doing this assignment.’” Failure to comply with this commitment may result in disciplinary actions up to and including failing this course and expulsion from the University.

**UF Counseling Services:**
Students experiencing crisis or personal problems that interfere with their general well being are encouraged to utilize the University’s counseling resources. Both the Counseling Center and Student Mental Health provide confidential counseling services at no cost for currently enrolled students. Resources are available on-campus for students having personal problems or lacking clear career and academic goals, which interfere with their academic performance. These resources include:

1. **University Counseling Center**, 301 Peabody Hall (next to Criser Hall), 392-1575, personal and career counseling; [www.counsel.ufl.edu](http://www.counsel.ufl.edu)
2. **Student Mental Health Services**, Student Health Care Center (2nd floor, Student Health Services, Infirmary), 392-1171, personal counseling; [http://shcc.ufl.edu/smhs/](http://shcc.ufl.edu/smhs/)
3. **Center for Sexual Assault/Abuse Recovery & Education (CARE)**, Student Health Care Center, Infirmary Rm 245, 392-1161, ext 4362, sexual assault counseling; and self help information tab at [www.counsel.ufl.edu](http://www.counsel.ufl.edu)

**Students with Disabilities Act:**
The Dean of Students Office coordinates the needed accommodations of students with disabilities. This includes the registration of disabilities, academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services, and mediating faculty-student disability related issues. **Dean of Students Office**, 202 Peabody Hall, 392-8565, [www.dso.ufl.edu](http://www.dso.ufl.edu).

**Software use:** All faculty, staff and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.