

# Foundations in Natural Resources and Conservation

## For 3200C: Summer B Session, 2012

**Lead Instructors:** Leda Kobziar (lkobziar@ufl.edu), Tim Martin (tamartin@ufl.edu)

**Teaching Assistant:** TBA

**Time:** Monday-Wednesday, 8:00 AM to 12:15 PM (periods 1-3) and Thursday 12:30-4:45 (periods 4-6)

**Objectives:** At the end of this course, each student will be able to:

- Evaluate current natural resources conservation, utilization, and policy practices against a knowledge of philosophical and political historical precedents
- Apply basic principles of biology, ecology, silviculture, and natural resources management to future coursework and careers
- Use first-hand interactions with professionals in various natural resource conservation careers to inform future decisions
- Demonstrate basic field, research, communications, and computer skills that will be integral for achieving a natural resources and conservation or a forest resources and conservation major

### Texts and Materials:

1. Required Text: Young, R. A., Giese, R. L. 2003. Introduction to Forest Ecosystem Science and Management. 3<sup>rd</sup> Edition, John Wiley & Sons, NJ. *May be purchased at O & B Textbooks, NW 13<sup>th</sup> St.*
2. A collection of excerpted book chapters, pertinent peer-reviewed journal articles, and visual aids, to be downloaded or viewed by students on-line at the course website (*E-Learning*)

### Supplemental Materials (not required):

3. DVD (and book): The Greatest Good; a Forest Service Centennial Film

## Format

- **Audience:** Forest Resources and Conservation majors, Natural Resource Conservation majors, students working on a fisheries minor, and anyone interested in natural resources.
- **Location:** Austin Cary Memorial Forest (ACMF) Conference Center, on-campus as necessary for internet access labs
- Daily lectures and presentations 4 days per week, 8:15-11:50 AM, often including a 1-2 hour field component
- Weekly visits from or field trips to natural resource managers, industry representatives, conservation groups, public agencies, consultants, as well as different terrestrial and aquatic ecosystems
- **Weekend Field Trip (end of Week 4):** Physiographic and land management transect from the lower coastal plain in Florida to the southern Appalachian Mountains in northern Georgia.
- **\*\*\*\*Students are expected to pay a \$30.00 fee for field trip expenses.** If this presents a financial hardship, please see one of the instructors.

## Evaluation of Student Performance

**30%** Final exam (multiple choice, short answer, essay)

**15%** Field trip project poster and presentation

**30%** Daily reading assignments and daily (M-W) "Reading Responses"

**15%** Weekly quizzes (Th) on lecture, field, and reading materials

**10% Attendance: 5% reduction of final grade per day of unexcused absence.**

We hope your attendance will reflect an enjoyment of the variety of subjects and activities this course will include. To take unforeseeable circumstances into account, we will drop the lowest two grades from your reading responses assignments. Please be at the ACMF or in the NZ classroom ready to go at 8:15 AM. If you are not present to hand in your Reading Response assignments at 8:15, you will get a zero grade for that assignment (unless legitimately excused). No make-up exams or quizzes will be allowed unless arranged prior to the exams. Late work will not be accepted. Make-up work for legitimately excused classes will be administered on a case-by-case basis, but cannot exceed 2 classes without overall grade deduction of 5% for each additional day missed. Due to the short duration of this Summer B Session, your attendance and prompt completion of readings and assignments is essential, and will enable you to participate and best benefit from everything this course has to offer.

Grading Scale		
90-93.3% A-	93.4-96.6 A	96.7-100 A+
80-83.3% B-	83.4-86.6 B	86.7-89.9 B+
70-73.3% C-	73.4-76.6 C	76.7-79.9 C+
60-63.3% D-	63.4-66.6 D	66.7-69.9 D+
Less than 60%= E (Fail)		

## Assignments

### Readings (See below, or look on E-learning under “Assignments”)

- Daily assignments from texts
- Other additional assignments available on course website, or distributed in-class

**Reading Responses:** A paragraph or two written in your own words elaborating on something that sparked your interest from the assigned readings, along with a few (2-3) questions you had about the readings, to be shared with the class intermittently throughout the semester

- Write 3 total paragraphs per week: One each for Monday, Tuesday, and Wednesday due at 8:15 AM
- Submit electronically before 8 AM on the due date
- Print out and bring to class
- **15 total, graded on a 0-3 scale; two lowest grades dropped**

#### *Grading Rubric for Reading Responses:*

Score	0	1	2	3
Expectation	Not done	A paragraph showing little sign of analysis or critical thinking, and/or more than 4 grammar, punctuation, or spelling (gps) errors	A thoughtful response to the reading, followed by two+ questions that address new ideas or insights, and less than 4 gps errors	A critical review of an aspect of the reading assignment, followed by two+ questions worthy of discussing at length with the entire class, and less than 2 gps errors

**Quizzes:** Covering any material presented Monday-Wednesday of the quiz week, and Thursday of the preceding week.

- Given Thursday mornings, Weeks 1, 2, 3, and 5
- **4 total quizzes with 10 questions, graded on a 0-20 scale**

**Course Project:** Working in groups, you will apply what you've learned in the course to actual, real-world natural resource use and conservation practices in the SE region. You will research the particular ecosystem management issues (relating to recreation, invasive/exotic species, fire, insects/disease, and wildlife), the vegetation, the climate, topography, and soils, and the specific policies and values that direct management for *one* of the following land management agencies and physiographic regions:

1. **Timber Industry, Lower Coastal Plain, ~150 ft. elevation**
2. **National Wildlife Refuge, Piedmont, 400-600 ft. elevation**
3. **Vogel State Park, Southern Appalachians, 1500-2500 ft. elevation**
4. **USDA Chattahoochee National Forest, Southern Appalachians, 2000-4000 ft. elevation**
5. **Brasstown Bald Wilderness Area, S. Appalachians, 4000-5000 ft. elevation**

Your group will create a poster as your visual aid and communication technique that highlights four major subjects: 1) a description of the ecosystem (dominant and characteristic species, structure, pattern, and density), 2) the geology, soils, and climate of your site, 3) a current natural resource health/ management issue, and 4) how the landowner/ agency is addressing the issue. Be sure to describe who manages the property, what type of agency/ company are they (e.g. federal vs. state, who oversees this department, what type of company TIMO/REIT, etc), the overarching goals/objectives of the managing entity and for this property in particular. Your poster will be shared with the class during a presentation on these topics that you will give at the location during our field trip. Be sure to use the natural props (e.g. nearby trees, vistas, etc.) to your benefit! The presentation should be about 15-25 minutes long, and each member must be involved.

**Exam:** Comprehensive exam given on August 6<sup>th</sup>

## Field, Computer, & Communication Skills

- Development of these skills will be incorporated into laboratory exercises, presentations, assignments, and computer-based workshops
- Identification of key common plants, pathogens, wildlife, insects
- Use of compass, map, clinometer, GPS, diameter/logger's tape, pacing, increment borer, land survey system, aerial photos/ stereoscopes, vertex hypsometer, spherical densitometer, wildlife sampling techniques
- Assessment of how microclimate and topography affect ecosystem structure, density, age and species distribution
- Introduction to additional tools of the trade (e.g. chainsaw, )
- Basic first aid and field safety

- Basic computer-based written communications/ analysis of text
- Basic computer-based data management and analysis using Excel
- Public speaking, presentation
- Creation of public information media/ interacting with the public

## Other Information

### Academic Honesty: Plagiarism will not be tolerated!

The University of Florida requires all members of its community to be honest in all endeavors. Cheating, **plagiarism**, and other acts diminish the process of learning. When students enroll at UF they commit themselves to honesty and integrity. Your instructor fully expects you to adhere to the academic honesty guidelines you signed when you were admitted to UF. As a result of completing the registration form at the University of Florida, every student has signed the following statement: *"I understand the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."* Furthermore, on work submitted for credit by UF students, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* It is to be assumed all work will be completed independently unless the assignment is defined as group project, in writing by the professor. This policy will be vigorously upheld at all times in this course.

### 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.

### Campus Helping Resources:

Students experiencing crisis or personal problems that interfere with their general wellbeing 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 or lacking clear career and academic goals, which interfere with their academic performance. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health is located on the second floor of the Student Health Services in the Infirmary.

1. *University Counseling Center*, 301 Peabody Hall, 392-1575; personal and career counseling: [www.counsel.ufl.edu](http://www.counsel.ufl.edu)
2. *Student Mental Health*, Student Health Care Center, 392-1171, personal counseling: [www.hsc.ufl.edu/shcc/smhs.htm](http://www.hsc.ufl.edu/shcc/smhs.htm)
3. *Sexual Assault Recovery Services (SARS)*, Student Health Care Center, 392-1161, sexual assault counseling; and
4. *Career Resource Center*, Reitz Union, 392-1601, career development Assistance and counseling.

### 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, 392-7066, [www.dso.ufl.edu](http://www.dso.ufl.edu).