

**FNR 4623--INTEGRATED NATURAL RESOURCE MANAGEMENT  
UNIVERSITY OF FLORIDA--SFRC**

**Instructor:** Dr. Douglas Carter  
phone 352-317-6802 (cell)  
drcart@ufl.edu

**Office:** 357 Newins-Ziegler Hall

**Lectures:** T, 11:45-12:35 (NZ 222) W, 10:40-11:30 a.m. (NZ 222)

**Lab:** W, 12:50-4:55 (NZ 222)

**Texts:** There is no required textbook. But several chapters from the following text will be assigned and available for download on E-learning. Additional readings both assigned and optional are located on E-learning as well.

Loomis, J.B. 2002, Integrated Public Lands Management. Second Edition. 594 pgs.

**Course Description and Objectives:** Integrated natural resource management deals with providing the right "mix" of natural resource commodities, functions, and services in the most desirable and sustainable way possible over time, incorporating biological, social, and economic principles and constraints.

This "capstone" course is most likely unlike any other you have taken. This course is project focused. The principle aim of the course is to give you the opportunity to apply the knowledge gained during your curriculum to design an integrated natural resource management plan (or "multiple-use" management plan) for an actual landowner (private and/or public). The plans you produce will lay the groundwork for future management on these properties. Besides providing the basic framework, the instructor will help steer you towards the data and tools you need to complete the task. The course also incorporates subject matter relevant to land management planning that may not be widely known or available in the standard curriculum.

**Course Structure:** Powerpoint presentations will be used in class as an enhancement to the lecture, but are not a substitute for good note taking. Powerpoint presentations will most likely be provided via E-learning. I will do my best to have lectures posted on E-learning website before the lectures, but I can't promise it. Guest lectures given in Powerpoint may or may not be uploaded to the website before class. Guest lecturers may or may not provide any notes to students as well so be prepared to take your own notes in class.

**Instructor Expectations:**

- In this class, your group will be expected to rely on your own efforts to bring together the information requested for the management plan. I will give you my best advice and help you as much as I can, but this is not a "canned" course where you will be given everything in class to complete your plan. Some independent research on your part is expected. I will provide you with the requirements for what needs to be addressed in the plan.

- You should rely on other faculty, outside experts, internet, etc. as well if you have data or other information needs.
- Take notes and not rely on the Powerpoint presentations in their entirety
  - I'll provide a rough outline for my lectures, but you need to fill in the gaps
- It is a good idea to always bring a calculator to class whether you will need it or not on any particular day
- When requested, bring a laptop to class
- Ask questions of me whenever you feel you need to, please!
  - If you don't ask questions, I must assume you understand me and/or your project is moving along successfully. If something is wrong, please contact me!

**Grading:** Grades will be based on a weighted combination of 1 exam, a written inventory report, a written final project report, oral project presentations, take home exercises, weekly progress reports, and participation. The weights will be distributed as follows:

exams (2)	20% (10% each)
participation (includes attendance and data collection, group participation, etc)	20%
final written project report	15%
written resource inventory report	10%
final project presentation	15%
resource inventory report presentation	10%
take home exercises/sampling plan	5%
weekly progress reports and data sheets	5%

Grades will be assigned based on the following percentages:

A	93+%	D+	67-69.99%
A-	90-92.99%	D	63-66.99%
B+	87-89.99%	D-	60-62.99%
B	83-86.99%	E	<60%
B-	80-82.99%		
C+	77-79.99%		
C	73-76.99%		
C-	70-72.99%		

Further information on UF grades policies can be found at:

<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

**Missed Exams and Late Assignments:** A missed exam can be made up within one week of the original exam date if the student's absence is due to a University recognized excuse. Otherwise, the student will receive a grade of zero on the exam. It is the student's responsibility to see the instructor about late projects, assignments, or missed exams.

Make-up exams will be offered only if your absence is a result of one of the following UF excused absences and **must be requested prior to the scheduled exam:**

**Required student participation in a University sponsored event:** These events will be excused with official documentation from the appropriate faculty or staff member. Documentation should be received PRIOR to the event;

**Religious Holidays:** Religious holidays are always excused; however, please notify the instructor, in writing, within the first two weeks of class so that appropriate accommodations may be made;

**Medical Emergencies:** Medical emergencies are excused with appropriate documentation from a health care provider;

**Family Emergencies:** These emergencies are only excused with written documentation.

**Lab Periods:** Unless otherwise noted, lab periods are to be used to collect and analyze data, prepare presentations, and produce reports. That time has been set aside and scheduled by students. No one should use the excuse that they can not meet during lab periods.

**Computer Lab Facilities:** UF has several high quality personal computer labs available for students. Most assignments will be aided by the use of personal computers. Students should be adept at the use of commonly used word processing, graphics, and spreadsheet software such as Microsoft Excel, Microsoft Word, etc. Students should familiarize themselves with these facilities and software early in the semester, and/or "tag up" with more experienced students.

Students should rely upon either their own computers, or computers in McCarty Hall and Fifield Hall to complete their assignments. **UF policy requires students to have their own personal computing capabilities.**

**Attendance:** Attendance is required. Because the final project is a group project, and a large portion of the final grade is dependent upon the successful completion of this task, attendance and active student participation will be noted and taken into account with respect to the final grade. Attendance includes showing up for data collection at your property. Students will be asked to assess each other's contribution towards the final project.

**YOUR ACADEMIC HONOR SYSTEM:**

In adopting this Honor Code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. A student-run Honor Court and faculty support are crucial to the success of the Honor Code. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the Honor Code.

### **The Honor Code:**

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

### **Pledge:**

On all work submitted for credit by students of the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." All students are required to abide by the Student Honor Code. Violations of this Academic Honor System will not be tolerated. Specifically, incidents of plagiarism of any type or incidents of referring to any unauthorized material during examinations will be rigorously pursued. Before submitting any work for this class, please read the academic honesty policies at <http://www.dso.ufl.edu/judicial/> and ask for clarification of any of its expectations that you do not understand.

**Academic Honesty:** As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that 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."

**More on Plagiarism:** Plagiarism is theft of intellectual property and is taken very seriously. It is really easy and inviting to simply copy large amounts of boring, technical narrative from another report, the web, etc. For example, soils information off the web. *Put everything in your own words.* Any plagiarism found in the report will result in a loss of one letter grade for every member in your group.

**Field Visits:** If you are prone to irritations or allergies by mosquitoes, fire ants, wasps, chiggers, ticks and poisonous plants, it is strongly recommended that you always use repellents (**not** supplied by instructor) and take precautions during and after each laboratory session. If you are allergic to insect bites, or if you have other medical conditions for which emergency treatment may be required, **it is your responsibility to:** (1) inform the instructors about the condition during the first day of class, (2) tell them where you keep your medicine; and (3) how to administer emergency treatment should the situation arise. Lyme disease, which may be contracted through tick bites, is a condition that all natural resource professionals should be knowledgeable of. While not fatal, it can be very painful and even debilitating. Therefore, it is

your personal responsibility to wear protective clothing and repellents that will minimize your chances of contracting this disease -- even with these precautions, you should conduct a self-examination for ticks after each field session. (the above notice courtesy of Dr. Eric Jokela)

**Classroom Demeanor:** I intend for classroom lectures and discussions to be held within a "light and cheerful" atmosphere. I welcome impromptu questions and interaction related to the subject matter of the course. However, students are expected to respect the dignity of the educational experience in the classroom at UF.

Notebook computers may be used during class lectures if their use is related to the class. Cell phones should be turned off at the beginning of class, no text messaging during lectures

Sidebar conversations, reading newspapers, or other disruptive or distracting behavior will not be allowed.

**GATORLINK E-MAIL:** Students in this class are required to have and use their GatorLink E-mail address for all UF related e-mail functions. Official university communications and all communications for this class are sent to students at this e-mail address. Forwarding your GatorLink account to another e-mail account may result in important e-mails being rejected. Please visit <http://www.gatorlink.ufl.edu/> to obtain your account and for additional information. Points of information will often be sent via the FNR4623 list-serv which is sent to your UF account. All e-mail correspondence with Dr. Carter must be through your Gatorlink account.

**Accommodations for Students With Disabilities:** The University of Florida provides high-quality services to students with disabilities, and we encourage you to take advantage of them. The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Appropriate documentation regarding the student's disability is necessary to obtain any reasonable accommodation or support service. Students with disabilities needing academic accommodations should 1) Register with and provide documentation to the Disability Resources Center (352-392-8565, Room 00001, Building 0020, Reid Hall) and 2) Bring a letter to the instructor from that office indicating that you need academic accommodations. Please do this as soon as possible, preferably within the first week of class.

**Helping Resources at UF:** 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 Services provide confidential counseling services at no cost for currently enrolled students. Resources are also available on campus for students lacking clear career and academic goals or students needing academic assistance.

**1. Wellness Counseling:** University Counseling Center, 301 Peabody Hall, 392.1575; [www.counsel.ufl.edu](http://www.counsel.ufl.edu)

**2. Personal Counseling:** Student Mental Health Services, Rm. 245 Student Health Care Center, 392-1171, [www.shcc.ufl.edu/smhs/](http://www.shcc.ufl.edu/smhs/) Includes: Alcohol and Substance Abuse Program (ASAP);

Center for Sexual Assault / Abuse Recovery & Education (CARE); Eating Disorders Program;  
Employee Assistance Program; Suicide Prevention Program

**3. Career Assistance:** Career Resource Center, 1st Floor, Reitz Union; 392.1601;  
[www.crc.ufl.edu](http://www.crc.ufl.edu)

**4. Academic Assistance:** The Teaching Center, Ground-level Southwest Broward Hall  
<http://www.teachingcenter.ufl.edu>

## Course Outline (Tentative—Subject to Modification)

Date	Lecture	Lab
January 7, 8	<p>Course Introduction            Planning principles            Landowners and Objectives            Groups Assigned</p> <p>(Readings: What's a Natural Resource Management Plan, and Chapter 1 in Loomis)</p>	Property visits
January 14, 15	<p>Inventory Methods Review</p> <p>(Readings: Conducting a Simple Timber Inventory)</p>	<p>Equipment checkout</p> <p>Property visits</p>
January 21, 22	<p>Example of Calculating CI's</p> <p>Inventory Report Elements</p>	<p>Property visits</p> <p>Inventory and Report Prep.</p>
January 28, 29	<p>Public Lands, Policy and Planning. Criteria for Evaluating Alts. and the Method of Scoring</p> <p>(Readings: Chapter 2 in Loomis)            (Youtube Video: The Rectangular Survey System)</p>	Inventory and Report Prep.
February 4, 5	<p>Forest Service Planning Process</p> <p>(Readings: Chapter 9 in Loomis)</p>	Inventory and Report Prep.
February 11, 12	<p>Forest Service Planning Process</p> <p><b>Ecosystem Services Markets (SS)</b></p>	<p>In class calculations of timber volumes and confidence intervals to date.</p> <p>Group Conferences</p>
February 18, 19	<p><b>No Class</b></p> <p><b>Recreation Considerations (TS)</b></p>	Inventory Report and Prep.
February 25, 26	<p><b>Certification Systems (CD)</b></p> <p><b>Multiple Use Theory</b></p> <p>(Readings: Chapter 8 in Loomis)</p>	Inventory and Report Prep

March 4, 5	<b>SPRING BREAK!</b>	
March 11, 12	<b>Management Tech. for Wildlife (CT)</b> <b>Exam #1</b>	<b>Developing Plan Alternatives Exercise</b>
March 18, 19	<b>***Inventory Presentations***</b>	<b>***Inventory Presentations***</b>
March 25, 26	<b>Final Plan Outline</b>  <b>Economic Analysis</b>  <b>***Written Resource Inventory Report Due Friday by 5 pm***</b>	<b>Field Trip</b>
April 1, 2	<b>Economic Analysis</b>  <b>Conservation Easements (CH)</b>	<b>Group Conferences</b>  <b>Final Project Plan Completion</b>
April 8, 9	<b>Regulations Impacting Mgmt (PG)</b>  <b>Community Forest Mgmt (KK)</b>	<b>Final Project Plan Completion</b>
April 15, 16	<b>TBA</b>  <b>Exam #2</b>	<b>Final Project Plan Completion</b>
April 22, 23  April 25	<b>***Final Project Presentations***</b>  <b>***Final Project Presentations***</b>  <b>*Hard Copies of Written Final Project Reports and Associated Documentation and Flash Drive or CD With All Data Due by 4 pm</b>	<b>***Final Project Presentations***</b>