

***EVS 520***  
***FOUNDATIONS OF COASTAL MANAGEMENT***  
***SPRING SEMESTER 2011***

CLASS SCHEDULE: W: 8:00 – 11:00 AM  
CLASSROOM: Friday Hall; Room 2062  
INSTRUCTOR: JOHN TAGGART, Ph.D.  
OFFICE: FRIDAY HALL, Room 2061  
PHONE: (910) 962-7909 (O)  
OFFICE HOURS: 11 – 12 noon W and BY APPOINTMENT  
E-MAIL: <taggartj@uncw.edu>

**COURSE DESCRIPTION:**

The course provides an in-depth study of coastal plain areas set aside for protection of natural features and processes for research, education and compatible public uses. Emphasis will be placed upon an integrated approach to ecological resource management as a function of the intended mission and goals for a given property.

**COURSE PURPOSE:**

The purpose of the course is to provide **successful students** with an understanding of major principles and processes associated with protected areas selection, acquisition, planning, and stewardship. The ultimate focus of the course is on the development and comprehension of MANAGEMENT PLANS for specific sites that balance natural resource protection and the needs of research, education, and other uses within an ever-developing matrix of adjacent human uses.

This course is intended only to serve as an introduction to protected area stewardship emphasizing ecological management. This endeavor is multi-disciplinary and often involves professionals from a wide variety of fields such as: biology, ecology, geology, education, real estate, land management, public administration, planning and economics. It is NOT expected that this course will make you a complete protected areas expert or specialist; however, it is expected that the course will assist you in understanding the areas of knowledge and processes required to perform such work short of actual job experience. Also, the course will not cover either facilities or master plan development.

**COURSE GOALS AND OBJECTIVES:**

Upon completion of this course, the successful student will have developed:

1. An understanding of the philosophy, concepts, and processes of protected area stewardship;
2. An understanding of the biological, physical, social, economic, and political contexts within which natural areas are acquired and managed;
3. An understanding of the disciplines and roles of professionals that are essential for input to achieve successful management of a protected area;

4. An understanding of common plant/animal communities and associated factors (e.g., soils, topography, drainage) found within the southeastern NC Coastal Plain;
5. A practical knowledge of stewardship issues (e.g., prescribed burning, invasive species, restoration, adjacent development impacts) common to natural areas of the southeastern NC Coastal Plain;
6. An awareness of the public relations implications/consequences associated with various resource management issues;
7. A working understanding of a protected area management plan and the ability to develop such a plan for a given area.

#### **INTENDED COURSE OUTCOMES:**

After successful completion of this course, students should be able to:

1. Articulate the intended missions and uses of coastal plain protected areas;
2. Identify communities and characteristic species of major coastal natural areas;
3. Develop a site selection process and evaluate potential natural areas for a given protected area category;
4. Understand and know when and how to apply resource management techniques including, but not limited to, prescribed burning, invasive species removal/control, and restoration/rehabilitation;
5. Write or critique a management plan for a coastal protected area.

#### **COURSE REQUIREMENTS:**

**A.** Readings plus written and oral assignments as designated by the instructor -- **students should complete all readings and assignments prior to class discussion of the topic.**

**B. Tests**

1. The Academic Honor Code will be strictly enforced.
2. Initial quiz (February 10) will be short-answer questions covering the first five classes.
3. Mid-Term Examination (March 3) will be comprised of both objective and essay test items that cover all sessions since the beginning of the semester.
4. Final Quiz (April 21) will be short-answer questions covering all field trips since spring break.

**C. Discretionary Assignments** (Announced and Unannounced Quizzes and Assignments):

Brief announced and unannounced quizzes and assignments may be administered in written and oral forms at the discretion of the instructor.

**D. Projects**

1. Students working in groups of two or three will prepare a detailed management plan for a coastal protected area: a.) powerpoint class presentation by all group members on April 21 and b.) submission of written plan by April 28. **GIS and GPS will be used to produce any**

**map and to locate significant features included in the report. References and citations will be in APA edition six format.**

2. Each student will prepare critiques (one page minimum plus at least five pertinent references per paper) for three different protected areas visited during the five field trips between March 17 and April 14. The three critiques are due on April 28.
3. Each student will prepare a bibliography (**APA edition six format**) of non-internet references for the following topics specifically pertaining to protected areas: a.) prescribed burning, b.) invasive species, c.) habitat restoration, and d.) site selection/acquisition. **A minimum of ten references in each of the four categories is required – due April 28.**

**E. LATE ASSIGNMENTS WILL BE PENALIZED ONE FULL GRADE FOR EACH DAY LATE.**

**F. NO HANDWRITTEN REPORTS WILL BE ACCEPTED.**

**EVALUATION OF CLASS ACTIVITY:**

INITIAL QUIZ	25 POINTS
MID-TERM EXAMINATION	75 POINTS
MANAGEMENT PLAN PRESENTATION/WRITE-UP	50 POINTS
CLASS PARTICIPATION	25 POINTS
PROTECTED AREAS CRITIQUES	25 POINTS
PROTECTED AREAS BIBLIOGRAPHY	25 POINTS
FINAL QUIZ	<u>25 POINTS</u>
<b>TOTAL</b>	<b>250 POINTS</b>

**GRADING SCALE:**

A	100 – 94%	B-	83 – 80%	D+	69 – 67%
A-	93 – 90%	C+	79 – 77%	D	66 – 64%
B+	89 – 87%	C	76 – 74%	D-	63 – 60%
B	86 – 84%	C-	73 – 70%	F	59% AND BELOW

**TENTATIVE\* COURSE AGENDA AND ASSIGNMENTS:**

- **JANUARY 12-----*COURSE OVERVIEW AND INTRODUCTION***
- **JANUARY 19-----*HISTORY AND PHILOSOPHY OF PROTECTED AREAS***
- **JANUARY 26-----*COASTAL PLAIN COMMUNITIES / LOCAL FIELD TRIP***
- **FEBRUARY 2-----*HABITAT RESTORATION***
- **FEBRUARY 9-----*SITE SIGNIFICANCE, SELECTION, AND ACQUISITION***

- **FEBRUARY 16**-----\*\***QUIZ**\*\* / **INVASIVE SPECIES**
- **FEBRUARY 23**-----**PRESCRIBED BURNING**
- **MARCH 2**----- **PLANNING AND PROTECTION OPTIONS / PLAN DEVELOPMENT  
/ USE CONFLICTS / DEALING WITH THE PUBLIC**
- **MARCH 9**-----\*\***MID-TERM EXAMINATION**\*\*
- **MARCH 16**-----**NO CLASS – SPRING BREAK**
- **MARCH 23**-----**FIELD TRIP: CAROLINA BEACH STATE PARK**
- **MARCH 30**-----**FIELD TRIP: FT. FISHER STATE RECREATION AREA / ZEKE'S  
ISLAND ESTUARINE RESEARCH RESERVE**
- **APRIL 6**-----**NO CLASS**
- **APRIL 9**----- **FIELD TRIP: BLADEN LAKES STATE FOREST / JONES LAKE  
STATE PARK (SAT. 9:00 AM)**
- **APRIL 13**-----**FIELD TRIP: GREEN SWAMP PRESERVE**
- **APRIL 20**-----**FIELD TRIP: SANDY RUN SAVANNAS STATE NATURAL AREA**
- **APRIL 27**-----\*\***QUIZ**\*\* / **CLASS PRESENTATIONS**
- **MAY 4**-----**FINAL PLANS and FIELD NOTEBOOKS DUE**  
(\*Schedule/Calendar is subject to change)

#### **ATTENDANCE POLICY AND EXPECTATIONS:**

- A. Students are expected to ATTEND **AND** ACTIVELY PARTICIPATE in each class. Students are expected to attend class on a regular basis and come to class prepared to discuss the readings and assignments scheduled for that day. Class attendance and discussion add to the interest level and learning environment of this course. The instructor reserves the right to modify course requirements (e.g., pop-quizzes, special assignments, papers, projects, etc.) whenever there is evidence that students are not coming to class prepared. Material for examinations will come from three (3) areas:
1. Material discussed in class that can be found in the required readings and powerpoints posted on Blackboard;

2. Material discussed in class, but not posted on Blackboard;
  3. Any video, DVD, or guest lecture given during class time.
- B. Attendance, commitment, and a strong sense of responsibility for self-improvement are important ingredients found in any successful student. Therefore, **ATTENDANCE WILL BE TAKEN EACH DAY OF CLASS.** Students will be allocated **ONE AND ONLY ONE ABSENCE WITHOUT PENALTY** regardless of an individual's reasons or circumstances. Class will begin promptly on time each class day — 1:00 PM. **Tardiness is the same as being absent for the entire class. Leaving class early is the same as being absent for the entire class.**
- C. Absences in excess of the allotted one (1) will result in a decrease of ten (10) **percentage points per absence** (one full letter grade) in computation of the student's final grade.
- D. Absences in excess of three (3) will result in the automatic assignment of the grade of **"F"** for the semester (i.e., students must attend at least 75% of the classes in order to pass the course).
- E. **FIELD TRIPS – WE WILL NOT HAVE A VAN FOR TRANSPORTATION, THUS YOU WILL HAVE TO PROVIDE YOUR OWN MEANS BEYOND THE THREE-PERSON CAPACITY OF MY CAR. CARPOOLING IS STRONGLY ENCOURAGED.**

**POLICIES ON CONDUCT AND ACADEMIC INTEGRITY:**

**Cell phone use (including texting) will not be tolerated in this class.** Please turn off your cell phone prior to class.

**All members of UNCW's community are expected to follow the academic Honor Code.** Please read the UNCW Honor Code carefully (as covered in the UNCW Student Handbook). Academic dishonesty in **any** form will not be tolerated in this class.

**Please be especially familiar with UNC-W's position on plagiarism as outlined in the UNCW Student Handbook.** Plagiarism is a form of academic dishonesty in which you take someone else's ideas and represent them as your own. Here are some examples of plagiarism:

- a. You write about someone else's work in your paper and do not give them credit for it by referencing them.
- b. You give a presentation and use someone else's ideas and do not state that the ideas are the other persons.
- c. You get facts from your textbook or some other reference material and do not reference that material.

Any student determined to have violated academic integrity in completing her/his assignments, such as plagiarism, copying, or acquisition of materials from unauthorized sources, will be dismissed from the class and receive a grade of **"F"** for the course.

**UNCW practices a zero tolerance policy for any kind of violent or harassing behavior.** If you are experiencing an emergency of this type contact the police at 911 or UNCW CARE at 962-2273. Resources for individuals concerned with a violent or harassing situation can be located at <http://www.uncw.edu/wsrc/crisis.html>.

**ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES:**

Students with diagnosed disabilities should contact the Office of Disability Services (962-7555). Please give me a copy of the letter you receive from Office of Disability Services detailing class accommodations you may need.

### **WRITING ASSISTANCE:**

The Writing Center is available to assist you with all of your writing needs at UNCW. Whether you need help planning a paper, revising a rough draft, or cleaning up a final draft, the Writing Center can help. Call 962-7857 or e-mail [uls@uncw.edu](mailto:uls@uncw.edu) to set up an appointment. The Writing Center recommends setting your appointment at least one week before the due date.

### **SUPPLEMENTAL REFERENCES:**

Buchanan, M.F. and J.T. Finnegan. 2008. Natural Heritage Program list of rare plant species of North Carolina. North Carolina Department of Environment and Natural Resources, Natural Heritage Program. Raleigh, NC. Available online <<http://www.ncnhp.org/Images/2008%20Rare%20Plant%20List.pdf>>.

LeGrand, H.E., S.P. Hall, S.E. McRae, and J.T. Finnegan. 2008. Natural Heritage Program list of rare animal species of North Carolina. North Carolina Department of Environment and Natural Resources, Natural Heritage Program. Raleigh, NC. Available online <<http://www.ncnhp.org/Images/2008-animal-book-complete.pdf>>.

Schafale, M.P. and A.S. Weakley. 1990. Classification of the Natural Communities of North Carolina, third approximation. N.C. DENR/DPR/Natural Heritage Program. Raleigh, NC. <http://www.ncnhp.org/Images/Other%20Publications/class.pdf>

Shafer, C.L. 1990. Nature Reserves: Island Theory and Conservation Practice. Smithsonian Institution Press. Washington, DC.

### **SELECTED WEBSITES:**

- Audubon North Carolina: <http://www.ncaudubon.org/>
- Halyburton City Park: <http://www.halyburtonpark.com/>
- National Forests in North Carolina: <http://www.cs.unca.edu/nfsnc/>
- National Park Service: <http://www.nps.gov>
- North Carolina Chapter of The Nature Conservancy: <http://www.nature.org/wherewework/northamerica/states/northcarolina/>
- North Carolina Division of Parks and Recreation: <http://www.ils.unc.edu/parkproject/ncparks.html>
- North Carolina Marine Protected Areas: [http://www3.mpa.gov/exploreinv/StatusSites.aspx?Org\\_ID=NC](http://www3.mpa.gov/exploreinv/StatusSites.aspx?Org_ID=NC)
- North Carolina Coastal Reserve and National Estuarine Research Reserve Program: <http://www.nccoastalreserve.net/>
- North Carolina Natural Heritage Program: <http://www.ncnhp.org>