COURSE SYLLABUS

Course Title: WETLAND ECOLOGY AND MANAGEMENT
Course Number: FORY 5250/6250
Credit Hours: 3, 3 hours lecture
Schedule: Monday 1-1:50, Wednesday 1-2:50
Prerequisites: BIOL 3060 (Ecology)

Recommended Text: Much of the course will be structured around Wetlands, 4th Edition by William Mitsch and Jim Gosselink (2007). A copy of this book will be on reserve at the library and the SFWS Extension office (Room #2301) for those who do not wish to purchase the text. In its place, information can also be adequately covered in Wetlands 3rd Edition (2000). See topic readings list for details.

Instructors:
Dr. Chris Anderson
Office: 4409 Forestry and Wildlife Sciences Building
Phone: 844-1033
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Office Hours: Monday 3-5:00 or available by appointment.

Dr. Kathryn Flynn
Office: 4339 Forestry and Wildlife Sciences Building
Phone: 844-1036
Email: flynnka@auburn.edu
Office Hours: Friday 9-11:00. Other times when available and by appointment.

Course Background: Wetlands are recognized for their ability to improve water quality, reduce flood damage and provide critical habitat. This course will provide an overview of wetland ecology and the various means (e.g. policy, regulatory, recreational, and economic) in which wetlands are managed in the southeastern United States.

Course Objectives: After successful completion of the class, students will be familiar with the general ecology of wetlands; a variety of wetland types in the Southeast U.S. (including the ecological services they provide); the primary laws and regulations associated with wetlands in the U.S.; and wetland management for wildlife, timber production, and water quality. As a final topic, the potential impacts of climate change on wetlands will be discussed.
Course Requirements: Lectures and field exercises will be used to review topics in ecology, biogeochemistry, soils, hydrology, policy, and management. We expect students will be familiar with most but not necessarily all of these components. For some students, a reasonable amount of review may be necessary to gain familiarity with various components. The course instructors can also assist students with this.

Three field trips are scheduled for the course and students are expected to participate in all of them. Details of the field trips will be given as we get closer but will involve visiting and working in wetlands. Rubber boots and proper outdoor clothing are strongly suggested. Trips will be taken on Wednesdays to destinations in the area however additional time (an extra 1-2 hrs) may be necessary. Students should make arrangements in anticipation of coming back after 5:00 on these days.

The course is intended for senior-level undergraduates and graduate students with an interest in potentially working with wetlands or as land managers. No pre-requisite classes are required but some general familiarity with wetlands will be helpful.

FORY 6250
Course Requirements: Those taking this class for graduate credit will be required to participate in an additional group project. This project will involve assessing portions of the E.V. Smith Research Center for wetland restoration. This will require a separate meeting with fellow graduate students and the instructors to discuss the project, a field trip(s) to the Center, and preparation of a team report. A meeting to discuss the details of this project will be scheduled early in the semester.

FORY 5250 Grades: Grades will be based on a combination of 2 exams, a graded field exercise and report, and overall class participation (class and field trip attendance). Breakdown of the final grade will be:
Midterm exam: 35%
Final exam: 35%
Wetland field report: 20%
Class participation: 10%

FORY 6250 Grades: Grades will be based on the same items listed for FORY 5250 plus the team project. Breakdown of the final grade will be:

Midterm exam: 25%
Final exam: 25%
Wetland field report: 20%
Graduate class project: 20%
Class participation: 10%

Instructor Availability: You are encouraged to ask questions and initiate discussion both in and out of class. In addition to normal office hours, students can schedule appointments outside regular office hours. You can e-mail (andrcj@auburn.edu and flynnka@auburn.edu) or phone to ask questions. We want to be available to you for help in clearing any difficulties you may have or for specific discussions.

Special Accommodations: Students who need special accommodations should make an appointment to discuss the Accommodation Memo as soon as possible. If you do not have an Accommodation Memo, but need special accommodations, contact The Program for Students with Disabilities in 1244 Haley Center (844-2096 V/TTY).

Academic Honesty: Auburn University expects students to pursue their academic work with honesty and integrity. Violations of the Student Academic Honesty Code and potential sanctions are detailed under Title XII of the SGA Code of Laws, which can be found in the Tiger Cub. Please do not cheat and do not forge doctor’s excuses. Students violating the Honesty Code will be reported for academic dishonesty.
Topics to be covered and tentative schedule (Readings to be covered #):

<table>
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<th>Week</th>
<th>Topic</th>
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| 1    | Review syllabus, class objectives  
Introduction, wetland types and definitions (M&G4: Chps. 1, 2)  
(M&G3: Chps. 1, 2) |
| 2    | Wetland classification and hydrology (M&G4: Chp. 8 p.259-269,  
Chp. 4) (M&G3: Chp. 21 725-744, Chp. 5) |
| 3    | Soils and biogeochemistry (M&G4: Chp. 5) (M&G3: Chp. 6) |
| 4    | Plant adaptations (M&G4: Chp. 6 p.207-222) (M&G3: Chp. 7 p.  
205-224) |
| 5    | Inland wetlands (Sharitz and Mitsch 1993) |
| 6    | Coastal wetlands (Odum 1988) |
| 7    | Functions and values; **Field trip to E.V. Smith Research Center**  
(M&G4: Chp. 11) (M&G3: Chp. 16) |
| 8    | **Mid-Term Exam** |
| 9    | Wetland policy, regulations, and permitting (M&G4: Chp. 14)  
Introduction to wetland delineation and mitigation (Handout-  
excerpt from 1987 COE Wetland Delineation Manual) |
| 10   | Ag and forestry regulations and management practices (Handouts) |
| 11   | **No Class- Spring Break** |
| 12   | Wetland delineation; **Wetland delineation field exercise**  
(Handout- excerpt from 1987 COE Wetland Delineation Manual) |
| 13   | Wetlands and wildlife management (Handouts) |
| 14   | Treatment wetlands (M&G4: Chp. 13) (M&G3: Chp. 20) |
| 15   | Mitigation and conservation easements; Wetlands and climate  
change (M&G4: Chp. 10); **Field trip to Yellowleaf Wetland**  
**Mitigation Bank** |
| 16   | **Final Exam** |

* Field trip date  
# M&G4 = Mitsch and Gosselink, Wetlands 4th Edition  
M&G3 = Mitsch and Gosselink, Wetlands 3rd Edition