WFS 340
Wetlands Ecology and Management
Spring 2008

Instructor: Dr. Matthew Gray (mgray11@utk.edu)
Phone: 974-2740 (office), 385-0772 (cell)
Office: 247 Ellington Plant Sciences Building
Website: http://fwf.ag.utk.edu/mgray/wfs340/340home.htm

Graduate Assistants: Melissa Foster (mfoste24@utk.edu, 201 Ellington PSB, 974-3897)
Drew Wirwa (dwirwa@utk.edu, 201 Ellington PSB, 974-3897)

Authors: William J. Mitsch and James G. Gosselink

Course Goal: To expose students to the basic principles of wetland ecology and management via class lectures, labs, and field experiences.

Course Topics:
• What is a Wetland?—USACE Definition
• Wetland Regulations
• Wetland Classification via Cowardin et al. (1979)—USFWS Protocol
• Wetland Plant, Waterfowl, Shorebird, and Amphibian ID
• Wetland Losses and Human Impacts
• Wetland Values
• Wetland Management (agriculture, moist-soil, and green-tree reservoirs)
• Waterfowl Carrying Capacity (duck energy-days, DED) Estimation
• Wetland Impoundment Construction (time permitting)

Required Materials: Field Clothes and Boots, Rain Gear, Camping Gear, Calculator, Laptop

Weights of Academic Assessments and Grading Scale:

The exam, lab practicum, homework assignment, and participation (field trip attendance) will be weighted as follows:

- Exam: 50% (Tuesday, 25 March 2008 at 7:30 am)
- Lab Practicum: 30% (Thursday, 13 March 2008 at 7:30 am)
- DED Assignment: 10% (due Friday, 28 March 2008 by 5:00 pm)
- Participation: 10% (see page 2)

Your course grade will be determined using the following straight\(^1\) scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Final Weighted Percent</th>
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<tbody>
<tr>
<td>A</td>
<td>90–100%</td>
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<tr>
<td>B+</td>
<td>87–89%</td>
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<tr>
<td>B</td>
<td>80–86%</td>
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<tr>
<td>C+</td>
<td>77–79%</td>
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<tr>
<td>C</td>
<td>70–76%</td>
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<tr>
<td>D</td>
<td>60–69%</td>
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<td>F</td>
<td>&lt;60%</td>
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\(^1\)Exam, practicum, and DUD assignment will not be curved.
Extra Credit:

You can positively influence your grade as much as 4.5% by volunteering for extra credit. Your volunteer work however must be related to wetlands or wetland fauna (e.g., amphibians, waterbirds). For every 8 hours of volunteer work, your final grade will be increased by 1.5% up to 4.5% (24 hours total). All volunteering must be completed by 25 April 2008. A volunteer form (see website) must be filled out by the supervising individual, and submitted to Dr. Gray.

Attendance:

Attendance on the 3.5-day field trip to Noxubee Wildlife Refuge in Mississippi will count for 10% of your final grade. You must participate in all field trip activities to receive 10% (2% deduction for each missed activity). Attendance at lectures is not mandatory.

Tentative Schedule:

3, 10–13, 24–25 March (lecture, indoor labs and exercises)*
25–28 March (field trip to Mississippi)**

*Meeting time is 8:30–12:00 and 1:30–5:00 daily in 156/157 PBB.
**We will leave Knoxville at 10:00 a.m. on Tues, 25 March, and return by 8:00 p.m. on Friday, 28 March.

EXCEPTIONS: • Monday (3 March): 102 Brehm (morning)
114 Ellington (afternoon)

3–7 March:

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<th>Monday</th>
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<tbody>
<tr>
<td>Morning</td>
<td>Wetland Definition, Wetland Regulations</td>
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<td>TN TWS Meeting</td>
<td>Henry Horton State Park</td>
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<td>Afternoon</td>
<td>Waterbird, Amphibian, and Wetland Plant ID</td>
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<td>TN TWS Meeting (Leave at 10:00 am)</td>
<td>Chapel Hill, TN</td>
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10–14 March:

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<th>Friday</th>
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<tbody>
<tr>
<td>Morning</td>
<td>Wetland Classification via Cowardin et al. (1979)</td>
<td>Wetland Management (agriculture &amp; moist-soil management)</td>
<td>Capacity Estimation Lecture</td>
<td>PRACTICUM (Classification &amp; Waterbird, Amphibian, and Plant ID)</td>
<td>Southeastern Wildlife Conclave</td>
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<tr>
<td>Afternoon</td>
<td>Human Impacts and Wetland Values</td>
<td>Wetland Management (green-tree reservoir management)</td>
<td>Capacity Estimation Assignment &amp; Lab Exercise</td>
<td>Southeastern Wildlife Conclave (Leave at 10:00 am)</td>
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24–28 March:

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<tbody>
<tr>
<td>Morning</td>
<td>Wetland Impoundment Construction</td>
<td><strong>EXAM</strong> (7:30–9:30)</td>
<td>Noxubee NWR (moist-soil units, GTRs, aquatic plant management)</td>
<td>Meet Dr. Steve Demarais, MSU Captive Wildlife Facility</td>
<td>SE Natural Resources Symposium</td>
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<td><strong>Leave for Noxubee</strong> (10:00 am)</td>
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<td>Afternoon</td>
<td>Answer DED Questions, Final Exam Review</td>
<td>Visit Briefly with Refuge Staff, Watch Video</td>
<td>Noxubee NWR (wood duck and RCW management, bat research)</td>
<td>SE Natural Resources Symposium</td>
<td>Drive back to Knoxville (7–8 hours)</td>
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**GENERAL POLICIES**

**Testing Policy:**

Make-up exams and practicums will **not** be given without a *bona fide* written and signed excuse from a vouching authority (e.g., physician, funeral announcement). The telephone number of the vouching individual must be provided with the written explanation. All tests are required.

**Academic Misconduct:** Group learning and studying is encouraged; however, academic misconduct on tests or assignments (including copying Excel files used in the duck energy-day assignment) will not be tolerated and result in immediate dismissal from and failure of the course.

**Learning Distractions:** Please turn off pagers and cell phones **prior** to class and lab.

**ADA Accommodation:**

Any student who, because of a disability, may require some special arrangements in order to meet course requirements should contact the instructor as soon as possible to make such accommodations as may be necessary.

**Religious Holy Day Observance:**

A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence IF, not later than the FIFTEENTH day after the first day of the semester (i.e., 01/24/08), the student had notified the instructor of each scheduled class that the student would be absent for a religious holy day.