WFS 340
Wetlands Ecology and Management
Spring 2005

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Authors: William J. Mitsch and James C. Gosselink

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

Course Topics:
• What is a Wetland—USACE Definition
• Wetland Delineation via Cowardin et al. (1979)—USFWS Protocol
• Wetland Plant, Waterfowl, and Amphibian ID
• Wetland Hydrology
• Nutrient Cycling in Wetlands
• Wetland Losses and Human Impacts
• Bottomland Sedimentation
• Wetland Values
• Wetland Regulation
• Wetland Impoundment Construction
• Wetland Management (agriculture, moist-soil, and green-tree reservoirs)
• Waterfowl Carrying Capacity Estimation

Required Materials: Waders or Hip Boots, Sleeping Bag, Field Clothes, 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% (Monday, 14 March 2005 at 8:30 am)
● Lab Practicum: 30% (Friday, 11 March 2005 at 2:00 pm)
● Participation: 15%
● DUD Assignment: 5% (due Monday, 14 March 2005)

Your course grade will be determined using the following 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>
</tr>
<tr>
<td>B+</td>
<td>87–89%</td>
</tr>
<tr>
<td>B</td>
<td>80–86%</td>
</tr>
<tr>
<td>C+</td>
<td>77–79%</td>
</tr>
<tr>
<td>C</td>
<td>70–76%</td>
</tr>
<tr>
<td>D</td>
<td>60–69%</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60%</td>
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</tbody>
</table>
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 27 April 2005. A volunteer form (see website) must be filled out by the supervising individual.

Attendance:

Attendance on a week-long field trip to west Tennessee and Mississippi will count for 15% of your final grade. Attendance at lectures is not mandatory.

Tentative Schedule:

<table>
<thead>
<tr>
<th>7–11 March</th>
<th>14–18 March</th>
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</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Tuesday</td>
</tr>
<tr>
<td>Morning</td>
<td>Wetland Definition, Wetland Delineation</td>
</tr>
<tr>
<td>Afternoon</td>
<td>Wetland Delineation, Waterfowl, Amphibian, and Wetland Plant ID</td>
</tr>
</tbody>
</table>

*Meeting time is 8:30–12:00 and 1:30–5:00 daily in 114 PSB.

**We will leave Knoxville at ca. 10:30 a.m. on Monday, 14 March, after the exam and return at ca. 5:00 p.m. on Friday, 18 March.

EXCEPTIONS: • Monday and Wednesday mornings we will meet in 128 PSB due to WFS 445 (Bird) Lab in 114 PSB.

• On Tuesday, 8 March, we will meet from 8:30–10:30 pm then break for 1½ hours and reconvene at 12:00 pm (noon) to finish lecture materials.

7–11 March:

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wed</th>
<th>Thursday</th>
<th>Friday</th>
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</thead>
<tbody>
<tr>
<td>Morning</td>
<td>Wetland Definition, Wetland Delineation</td>
<td>Hydrology, Nutrient Cycling</td>
<td>Human Impacts, Sedimentation, Values</td>
<td>Wetland Management</td>
</tr>
<tr>
<td>Afternoon</td>
<td>Wetland Delineation, Waterfowl, Amphibian, and Wetland Plant ID</td>
<td>(Finish up morning lectures)</td>
<td>Wetland Regulations</td>
<td>(Finish up if necessary)</td>
</tr>
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</table>

14–18 March:

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wed</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>EXAM (8:30–10:00) Leave @ 10:30</td>
<td>Meet TN NWR Personnel, Presentation, Tour of Refuge</td>
<td>Meet Dr. Allan Houston (bottomland sedimentation)</td>
<td>Meet Dr. Rick Kaminski, MSU Presentations</td>
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<tr>
<td>Afternoon</td>
<td>Stay at Milan 4-H Camp</td>
<td>Tour of Refuge, Visit WTES, (Stay @ Ames Plantation)</td>
<td>Drive to Noxubee Wildlife Refuge</td>
<td>Meet Noxubee Staff &amp; Tour Refuge</td>
</tr>
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</table>
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 plagiarism and copying homework assignments) 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., 01/27/05), the student had notified the instructor of each scheduled class that the student would be absent for a religious holy day.