

WF 3131: Applied Aquatic & Terrestrial Ecology Laboratory - Fall 2007

Instructor: Dr. Eric Dibble; 325-7495; edibble@cfr.msstate.edu
Laboratory: Thursday & Friday 1:00- 4:50 PM, Thompson Hall, Room 134
Teaching Assistant: Mr. Rafael Gonzales* (rm 210) rg165@msstate.edu

Office Hours: Tuesday 2:00-4:00 PM, or **by appointment**.

(*See to check-out field equipment)

Text: Field and Laboratory Methods for General Ecology, 4th edition, Brower, Zar, von Ende (1998).

Lab Schedule:

<i>(Day & Date)</i>	<i>(Topics & Activities)</i>
Week 2: (Th 8/30) - (Fr 8/31) -	Introduction / Laboratory objectives Independent team field project Assign Teams & Land Units Lecture: "The Question"; ecological observation and field measurement
Week 3-4: (9/1 - 9/18)-	<u>Team</u> site visit Survey study land unit (pictures, map and classify habitat types) Collect preliminary data and prepare site description* (Due next lab; week 5)
Week 5:- (Th 9/20)- (Fr 9/21)-	<u>Class</u> field exercise* (Due 9/27 lecture period) & demonstration Data collection & monitoring terrestrial populations Stream sampling & monitoring of aquatic systems Answering: "The Question" (Pattern & Hypothesis) Sampling design & field experimentation (natural & manipulative) We will be going <u>off campus so be prepared for the field</u>
Week 6-7: (9/22-10/10)-	<u>Team</u> field work & data collection Decide on "Question" & design experiment (initiate data collection) Conduct literature review (species inventory, methods, ecological questions) Prepare team progress reports *(Due next lab week 8)
Mid Semester.....	
Week 8: (Th 10/11)- (Fr 10/12)-	<u>Team</u> Progress Reports (oral presentation in class) Presentation includes progress of fieldwork conducted to date on land unit Explain and describe the experimental design & sampling methods Critique of colleagues' progress/experiment (methods?, approach?, questions?) Written review & comments* (Due 10/16; lecture period) .
Week 9 -14: (10/15-11/20) -	<u>Team</u> work; continue field work and data collection (if necessary) Analyze data collection to answer your "Question(s)" Write & prepare final report (maps, tables, graphs, figures, pictures) Prepare for defense (coordinate team responsibilities)
Final Report Due 11/27	<u>Written document is due to instructor by 5 PM on this day</u>
Final Week: (Th 12/11; 3-6pm*)- (Fr 12/11; 12-3pm*)-	FINAL Defense of Team Project* Presentation & oral defense of your field experiment Questioned by professional panel (other ecology faculty)

***Team defense will conducted during scheduled times during exam week.**

Course Information- Fall 2007

Grading Policies:

1. Final grade determination will be based on following scale:
A: 90-100%
B: 80- 89%
C: 70- 79%
D: 60- 69%
F: < 60%
2. Tardiness in submitting required assignments will result in the assignment grade decreasing at a rate of 10%/day. After 3 days, no grade will be given.
3. Questions concerning any grade must be addressed in writing within 1 week following the return of the assignment. Following this period, all grades are final.
4. The laboratory final oral exam is comprehensive; including questions on subject material presented during the semester. During the exam, individual students are expected to defend their answers thoroughly in front of an expert panel made up of graduate students and faculty. Student teams are expected to validate results with data collected from their assigned land units and/or available literature, and scientifically defend all answers to questions posed by the professional panel.
5. Absences: All students will be required to attend the laboratories. Each absence from a laboratory will result in a loss of 1 letter grade (i.e., 90 ==> 80) applied against the final course grade.
6. Students not present in a laboratory are responsible for all materials given, including lecture notes and handouts. **Do not ask the instructor for handouts or course material** (if you do ask the instructor or TA for such material outside of the scheduled class period after being absent, your current grade will be reduced by 10%).
7. Students are expected to be prepared for field laboratories and dressed accordingly. Lab may require students to enter water that is 1-2 feet deep to collect plant and/or animal data. (Take personal **water** and containers to carry it; rain gear if necessary). Students **must** participate in these activities (or they will receive a reduction in their final grade by 10%)
8. **Important Dates**

Site visit summary **Due: week 5 (during respective lab period)**

Class field exercise **Due: September 27th (during lecture period)**

Team progress reports **Due: week 8 (during respective lab period)**

Project Review and comments **Due: October 16th (during lecture period)**

Final Report **Due: November 27th by 5 PM**

Team project defense (Oral): **Final week (scheduled times for respective lab period)**

9. Course Grade Distribution:

<u>Basis of Grade</u>	<u>Point Value</u>	<u>%</u>
Participation & Professionalism	75	15
Team Site Visit (summary)	25	5
Class Field Exercise	25	5
Progress Report (Presentation & Field demonstration)	50	10
Progress Review and Comments	25	5
Written Final Report (field experiment & assessment)	200	40
Team Project Defense	100	20
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TOTAL	500	100

10. Exam & Exercise Information:

1. Team Project Defense - The oral defense will consist of questions that comprehensively deal with concepts presented in lab during the semester. The student is required to ecologically defend answers to questions relative to environmental scenarios presented by a professional panel made up ecology faculty. This defense serves as a practical exercise requiring student teams to validate their field experiment and assessment with data collected by the team during the semester. The student is expected to properly identify all plants and animals used in their experiment and data set by common and scientific names. The questions and scenarios presented during the defense are designed to evaluate team cooperation, professionalism, and the individual student's basic knowledge of field methodology used in experimentation and applied ecology. The defense will take approximately 1 hour to complete.
2. Class Field Exercise **must** consist of the following parts: 1) a brief introduction discussing the question to be addressed and study area, 2) description of the methods, 4) results and discussion of the relevance of the data to the question(s) addressed, 5) a summary or abstract, and 6) a literature cited. * Refer to Unit 1, section 1c of your laboratory booklet regarding writing a research report.

Mississippi State University's Honor Code:

"As a Mississippi State University student I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the action of those who do."

