

Syllabus for Field Biology

Biol 3099/5099: May Intersession 2008

<http://www.wtamu.edu/~rmatlack/bio3099.htm>

***Please see the above web site for packing lists and other info!

Dr. Ray Matlack

ANS 333, 651-2583

rmatlack@mail.wtamu.edu

Meeting times: First class meeting is at 9:00 am on 12 May (ANS 320). See class schedule below for additional meeting times.

Important note: No alcohol, illegal drugs or firearms are allowed on this trip and violation of this policy will result in a failing grade for the course and ejection from the class. If you are ejected you will be responsible for arranging your transportation home.

Books: Mead composition notebook, 100 sheets, 9 ¾ x 7 ½, college ruled (or similar bound and ruled notebook – **SPIRAL NOTEBOOKS ARE NOT ACCEPTABLE**) and *National Geographic Field Guide to the Birds of North America

*Optional

General Information:

Field biology is a class designed to provide students with experience and knowledge of techniques commonly used in field research. Each year the class is conducted in a different part of the country and focuses on the ecology of the region and the natural history of the vertebrates that occur there. Time will be spent in the classroom and in the field. However, this is a field class and attendance during a long (approximately 2-week) field trip is a required part of the course. We will be away from campus on a single long trip during most of the class. Expect to be away from campus from at least 13 or 14 May until 25 or 26 May. There will NOT be an opportunity to return to campus during the field trip and students should be prepared to complete the entire trip or not take the class. Students will not be allowed to bring their own vehicles and participation in the entire trip (barring serious injury or illness) is mandatory. This year's trip will be to Arizona. Much of our time will be spent in southeast Arizona, exploring the deserts that occur at low elevations and the forests that occur at higher elevation. You will need sturdy hiking shoes, sunscreen, and other equipment that you must provide (a complete list will be handed out at the start of the class). Expect to be active at all times of the day (early mornings, late nights, etc.) as we will tailor our active times to suit the weather and activity periods of the particular organisms of interest (e.g., night time for capturing bats). We may be camping in primitive campsites (i.e., no bathrooms, showers, running water, etc.). Expect and prepare for rough field conditions such as hot or cold temperatures (anything can happen this time of year), rain and thunderstorms, ticks, mosquitoes, venomous reptiles, etc. Each student is required to contribute to an account to cover the cost of your meals, lodging (campsite fees), and entry fees. I expect this to cost us each about \$165 for the duration of the trip but this amount is subject to change. Once we start shopping for the trip, your money is nonrefundable! Your grade for the class will be based in part on participation and this includes your attitude and ability to get along with others. I will NOT tolerate behaviors that reduce the effectiveness of the class or the enjoyment of others. The schedule and objectives of the course are tentative and subject to change.

The first class meeting will be 12 May at 9:00 am in ANS 320. **Be prepared to stay late as we will need to prepare to depart early the next day. This first class meeting is MANDATORY (if you don't attend you will not be allowed to participate in the trip)!**

Course Objectives:

1. Learn field safety procedures and become familiar with hazards common to field biologists
2. Develop a understanding of and familiarity with techniques used to study and assess wildlife populations
3. Become familiar with the equipment used by wildlife biologists
4. Learn to take and maintain field notes
5. Learn safe handling techniques for a variety of wildlife species
6. Become familiar with the use of field guides to identify animals in the field
7. Develop an understanding of the ecology of and factors influencing the unique diversity of Arizona
8. Become familiar with the vertebrates of Arizona and associate these with their habitat (vegetation type, etc.)
9. Examine the influence of elevation on plants and their animals associates in Arizona

Class Policies:

Attendance – Since this is a field course, attendance in all field activities is mandatory. If you miss lecture you are responsible for everything which is discussed in lecture, any announcements made in class, everything that is assigned as class reading, and any handouts given out in class. If you miss class, you must make your own arrangements for access to class notes or handouts from classes that you miss. I will not provide copies of my class notes except under very rare circumstances (serious injury, surgery, etc.) and by PRIOR arrangement only.

Grading –

Field notebook:	200 pts
Participation:	250 pts
Other assignments*	Up to 250 pts

*Additional assignments will be given, as necessary, to facilitate learning of the material or to help meet the course objectives.

Overall class grade will be based on the percentage of the points you make out of the total number of points available (Class grade = (points made/total points available) x 100). Letter grades will be assigned using the grade scale presented below.

- Grade scale:** A= 90-100%
 B= 80-89%
 C= 70-79%
 D= 60-69%
 F= 0-59%

Makeup assignments and late work – All assignments (exams, quizzes, projects, papers, etc.) must be completed at the times announced in class or in the syllabus. Make up assignments will be possible only with a doctor’s letter or letter of absence for a school-sponsored event. If you have a serious reason for missing a class or assignment, you must contact me **BEFORE** the scheduled due date or class meeting to notify me that you cannot complete the assignment (again, written documentation is required). You are then responsible for arranging with me to make up the assignment within 2 days of your return to campus.

Note: assignments are subject to change and I reserve the right to change any and all information contained in the syllabus.

Course schedule (tentative):

<u>Date</u>	<u>Activity</u>	<u>Contact information**</u>
May 12, 9:00 am – 5 pm (could be later, keep your schedule free) in ANS 320 MANDATORY FOR ALL STUDENTS!	<ul style="list-style-type: none"> • \$165 due at start of class (CASH only) • Class information, orientation and calendar (fill out releases for field trips) • Safety in the field • Overview of trip • Packing lists and required equipment • Assign a class treasurer • Determine shopping team and menu • Set up tents, inspect equipment • Prepare for trip (shopping, etc) • Pack vans and prepare to depart 	NA
May 13, 7:00 am	Depart for Bosque del Apache NWR and camp there (NOTE: If you are late you will be left behind and will have to drop the class)	505-835-1828
May 14	Camp in NF north of Silver City NM	NA
May 15-19	Camp in NF near Portal AZ	NA
May 19-21	Travel to Tucson AZ; camp in Catalina State Park or in NF	NA
May 20	Visit Arizona-Sonora Desert Museum (near Tucson)	NA
May 21-23	Camp on TNC property near Phoenix	NA
May 23-26	Camp in NF near North Rim of Grand Canyon	NA
May 26	Return to Canyon	
May 27	Equipment maintenance	

**Contact information provided is for the park or area office only and should be used only in the case of emergencies. Additionally, we will not spend much time in the actual park so this contact information may not enable you to contact our group. I will carry my cell phone (806-336-1904) but coverage will likely be spotty. If an emergency arises and you need to get in touch with us, contact my wife Mardee Matlack at home (806-655-2469) or on her cell (806-336-1903), I will check in with her regularly.

Note: This schedule is tentative. Conditions may dictate changes in our itinerary and all information is subject to change.

Course Content:

May	12	Field safety and orientation, equipment use and maintenance, trip preparation
	13	Waterbirds; water management on NWRs
	14-19	Ecology of sky islands, rare species in se AZ
	19-21	Ecology of the Sonoran Desert
	21-23	Water issues of the southwest, mitigation, endangered species
	23-26	Grand Canyon - ecology
	27	Equipment maintenance

Grading and Assignments:

Participation:

We will be spending a great deal of time together, often under rough conditions, so participation and attitude are very important. You will get as much out of this class as you invest! A large portion of your grade will be based on participation. Your participation grade will be assessed as follows (see “Participation Grade Form” at the end of the syllabus for more detailed information):

Attitude – ability to get along with others, tolerate field conditions, demonstrate interest in subject, etc.

Participation – you will be judged on how actively you seek to be involved in all activities (e.g., do you get out of the van to see something, ask questions, make observations, and help clean up equipment, facilities, and vehicles without being asked, etc.). **If you cannot participate in certain field activities, see me to arrange an alternate assignment, if possible (remember, the field trip is mandatory). This is your responsibility, not mine!**

Punctuality – this is simple, don’t make the class wait on you!

Being prepared – make sure you have all the equipment you need (water, field notebook, pencil, sunscreen, etc.) and that it is ready to go BEFORE our scheduled time to meet.

Field notebook:

Each student will be required to maintain a field notebook following the format described in class. Your grade will be based on the completeness and quality of the notebook. A large portion of your grade will come from the notebook and you should invest considerable time throughout the course to your notebook.

Daily Log (200 pts)– you will make entries in your notebook several times a day in addition to the specific entries listed below. I expect you to have a complete and thorough account of the trip on a day-by-day basis. Be sure to include the following in your daily entries:

- Date and conditions
- Travel information including all departures and arrival locations and general route information
- Activities (hikes, camp setup, meals, etc.)
- Observations (species lists, habitats and changes in habitats, and anything else you find of interest)

Be detailed enough in your daily entries that you could open the notebook in 20 years and recreate the trip completely and come up with a list of species you would expect to find along the way.

NOTE: Field notebook will be collected several times over the course of the trip to ensure that students are maintaining their notebooks properly!

Specific assignments (record this information in your notebook; be sure to follow safe practices, let me know where you will be and when you will return):

- **Table of contents (20 pts)**
 - Number each page of your notebook and include on the first page, the page number for each of the assignments listed below. Daily entries need not be included in the table of contents. Be sure that, in addition to the assignments listed below that, you keep a complete and thorough account of the entire trip.
- **Independent species lists (20 pts each)**
 - In small groups (3 or 4) - plan a hike and develop a species list for the hike
 - Include the following in your notebook:
 - List of trip participants
 - Date and time of your hike and weather conditions
 - General and specific location and approximate length of your hike (time and distance)
 - Habitats encountered on your hike
 - Species list of all vertebrates observed (including sign) by habitat
- **Focal species observation (20 pts each)**
 - Individually or in small groups (2-3) – choose a focal species and observe an individual of the species (or individuals) for 30 minutes making careful notes on the activities of the individual(s). Include the following in your notebook:
 - List of participants
 - Date, time, and weather conditions
 - General and specific location of your observations
 - Reasons for choosing the focal species
 - List of observations by time
 - Summary

- **Field quizzes (20 pts each)**
 - Instructor led quizzes where knowledge of information presented or discussed during the course will be evaluated including identification of vertebrates, ecology, safety, and other subjects.

Students with Disabilities:

WTAMU seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to register with Disability Support Services and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

Copyright:

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Safety:

Safety is everyone's responsibility. Material Safety Data Sheets (MSDSs) are provided for all chemicals used in this class. MSDSs provide information about physical properties, health risks, fire and explosion data, and other important information associated with these chemicals. Before handling or using a chemical, you should refer to the MSDS for that chemical. It is your responsibility to inform the instructor in writing of any health conditions that may prevent you from safely using a chemical (pregnancy, auto immune deficiency, etc.). It is also the responsibility of the student to report any spills or problems found while storing or using a chemical. If you are unsure about a chemical, always ask. If you see any unsafe condition, notify your instructor immediately. If you are unsure about the proper and safe operation of any piece of equipment, ask your instructor for proper instruction. All injuries, spills of materials and unsafe conditions must be reported to the instructor immediately.

Evacuation:

When you receive notice to evacuate the building, please evacuate promptly but in an orderly manner. Evacuation routes are posted in various locations indicating all exits, outside assembly area, location of fire extinguishers, fire alarm pull stations, and emergency telephone numbers (651-5000 or 911). In the event an evacuation is necessary, evacuate immediately; do not use elevators; take all personal belongings with you; report to outside assembly area and wait for further information; students needing assistance in the evacuation process should bring this to the attention of the instructor at the beginning of the semester.

Scholastic Dishonesty:

It is the responsibility of students and instructors to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. Commission of any of the following acts shall constitute scholastic dishonesty. This listing is not exclusive of any other acts that may reasonably be said to constitute scholastic dishonesty: acquiring or providing information for any assigned work or examination from any unauthorized source; informing any person or persons of the contents of any examination prior to the time the examination is given in subsequent sections of the course or as a makeup; plagiarism, submission of a paper or project that is substantially the same for two courses unless expressly authorized by the instructor to do so. (2007-2008, CODE OF STUDENT LIFE, Rules and Procedures for Students, West Texas A&M University).

A complete statement regarding scholastic dishonesty can be found in the Student Code of Life at <http://www.wtamu.edu/administrative/ss/code/code.html#procedures>.

Name _____

Participation grade form

Safety

Uses safe practices	50	30	10	5	0
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Attitude

Handles field conditions	30	20	15	10	0
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Gets along with others	30	15	10	5	0
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Demonstrates interest in subject	50	20	15	10	0
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Considerate of others (no late nights, noisy behavior, etc.)	50	25	5	2	0
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Participation

Looks out for the safety of others	30	10	5	2	0
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Actively seeks involvement	30	15	3	2	0
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Asks questions and makes observations	20	10	3	2	0
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Work ethic (field prep and cleanup, considerate, etc.)	50	40	30	0	0
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Punctuality	30	10	5	0	0
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Prepared	30	10	5	0	0
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Total possible	400				
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I reserve the right to change this form at any time.