

LAB AND LECTURE SYLLABUS BIOL 5602 FIELD ZOOLOGY Summer II 2016

Instructor: Dr Sean P. Graham	Office: WSB 221
Lectures: July 25-July 30; August 21	Office Hours: N/A
Laboratory: Field trip August 1-August 20	Email: sean.graham@sulross.edu

Course Description: The major goal of the Sul Ross biology graduate program is providing mater's students with an immersive field training experience. Specifically, our goals are to teach the scientific method, field research techniques, use of statistics in field research, and how to effectively communicate your scientific results. This course will touch on all of these items, and will focus greatly on field techniques. There is no better way to learn field biology and gain field experience than to pack up and leave for the field. Therefore, the course will utilize a challenging 20 day field camp to train students in capture, processing, identification, and preservation of vertebrates. Students will participate in group research activities as well as develop their own individual research project. Individual research projects will include either bird point transects, bat surveys, small mammal trapping.

Grading: The table below illustrates the grading for this course. There will be no exams.

Participation (field camp behavior & conduct)	200
Field and collections technique demonstrations	100
<u>Field Notebook</u>	<u>200</u>
Total Credit 500 points	
A 90 — 100%	B 80 — 89%
C 70 — 79%	D 60 — 69%
F 0 — 60%	

Field Trip Participation is mandatory. It is the laboratory and lecture portion of this 6 credit hour class. The dates are August 1-August 20. We will camp out the entire time. Running water will be available for bathing and flush toilets.

Camp duties and etiquette. I am a huge proponent of requiring young men and women to develop into self-reliant, functional members of society. Furthermore, this course is intended to forge you into a field biologist. You will develop these skills on this trip. Each student will have their own personal duties as a member of the camp crew; they will be responsible for setting up and breaking down camp (packing up their own gear), they will have to share a tent with a buddy (helping the buddy put up and take down the tent), and they will be part of a cook and clean crew. Field biology requires good communication and interpersonal skills. **Lack of participation or a bad attitude** about any of these duties will result in deduction of points and could lead to trip forfeiture (see below). Students will also be responsible for planning the camp meals and doing the shopping. Conditions will be hot and sweaty; showers will only be intermittently available, although swimming and toilets will be available at almost all campsites. Above all else, your behavior and conduct in this area will be important for a smooth trip; patience with others is the most important thing. Whining, complaining, backtalk, or being a jerk will not be tolerated. Dr. Graham is the team leader and students are expected to follow his lead and keep up a good attitude for the trip. Your safety, the safety of others, and the success of the field trip depend on this, so I am taking this very seriously. Nearly half your grade depends on this.

Trip forfeiture. Dr. Graham will immediately drop and fail a student who becomes completely unmanageable. Major offenses (e.g., physical confrontations, constant verbal or emotional abuse toward another student or myself) will result in the student to Alpine. Students will have to arrange for a pick up.

Drug and Alcohol Policy. Sul Ross State University does not allow possession of alcohol or drugs in university vehicles. Therefore, this will be a dry field trip. Also, drinking alcohol can seriously impair your judgment and dehydrate you, two factors that are often associated with accidents and death in the field. Therefore, alcohol found in camp or in vehicles will be immediately confiscated and may result in deduction of participation points. More serious offenses (e.g., students found drunk or seriously impeded with a hangover during class time) may result in trip forfeiture. Drugs found anywhere near this trip will result in immediate trip forfeiture for the student in possession and they will be turned over to the authorities. We will be driving all over the place during this trip, subject to checks by

border patrol and other law enforcement agencies, and I do not want them to find anything! Students will sign an alcohol and drug use agreement before we leave.

Course Objectives. At the end of the semester, students should be able to:

1. Employ a wide series of trapping and searching techniques useful for finding and capturing a wide variety of vertebrates.
2. Be familiar with additional field techniques used to mark, monitor, and obtain data from a wide variety of vertebrates.
3. Master field identification of vertebrates, and develop skills in sampling and preserving specimens obtained from them.
4. Become familiar with the natural history and ecology of the Trans-Pecos.
5. Become familiar with the natural history and ecology of a wide range of animals of Trans-Pecos.
6. Become familiar with documenting natural history and distribution information for amphibians and reptiles of the Trans-Pecos.

Program Learning Outcomes (SLOs) for MS in Biology:

1. Implementation of scientific methodology
2. Utilization of field techniques
3. Utilizing statistics
4. Effectively disseminate scientific findings.

Tentative itinerary

July 25-July 30. In class 9am-5pm WSB 221. Orientation and vertebrate ID.

Field Zoology Travel Itinerary	Location	activity	group activity
1-Aug-18	Alpine to Basin Campground	orientation and check-in	travel day
2-Aug-18	BBNP	continue orientation; establish group and individual projects and review field notebook format	PM road cruise
3-Aug-18	BBNP	individual projects	PM road cruise
4-Aug-18	BBNP	individual projects	PM road cruise
5-Aug-18	BBNP	individual projects	PM road cruise
6-Aug-18	Independence Creek		fish sampling
7-Aug-18	Independence Creek		fish sampling
8-Aug-18	Independence Creek		fish sampling
9-Aug-18	BBNP	individual projects	PM road cruise

10-Aug-18	BBNP	individual projects	PM road cruise
11-Aug-18	Free Day		
12-Aug-18	Free Day		
13-Aug-18	BBNP	individual projects	PM road cruise
14-Aug-18	BBNP	individual projects	PM road cruise
15-Aug-18	BBNP	individual projects	PM road cruise
16-Aug-18	BBNP	individual projects	PM road cruise
17-Aug-18	BBNP	individual projects	PM road cruise
18-Aug-18	Boquillas Canyon		freshwater vertebrate sampling
19-Aug-18	Boquillas Canyon		freshwater vertebrate sampling
20-Aug-18	Return to Alpine		

Tuesday Aug 21 WSB 221 de-briefing and field notebook grading Grades turned in by 5pm
Students with any learning disabilities will be provided with accommodations. If you would like to request such accommodation because of a physical, mental, or learning disability, please contact the ADA coordinator at 837-8203, FH 112.
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