

**LAB SYLLABUS**  
**BIOL 4406L Ecology Spring 2017**

**Instructor:** Sean P. Graham, PhD  
**Laboratory:** Wednesday 3-415 WSB 107  
**Office:** WSB 221

**Office Hours:** MWF 11-12, T-Th 2-3  
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**Laboratory:** Much of the material covered in lecture will be greatly enhanced and expanded in the laboratory component of this course. You will be tested on this material during the scheduled exam periods. You need to check Blackboard to download and print any lab notes preceding each meeting.

**Attendance:** is required for labs. No lab make ups are possible. Missing labs will seriously hinder your ability to make good grades on lab practicals. Lab practicals are impossible to re-take. Missing a lab practical will result in a 0 for that test, and this will seriously affect your grade.

**Supplies:**

Field notebook

**Lab Grading:**

3 lab practicals @ 100 pts ea	300
Field notebook	50
<b>TOTAL</b>	<b>350 points</b>

**Program Learning Outcomes (PLOs) for Biology:**

- 1) Demonstrate an understanding of evolution by natural selection.
- 2) Demonstrate an integration of environmental awareness into everyday modern life.
- 3) Demonstrate an understanding of how to incorporate molecular biology into the study of the whole organism.
- 4) Demonstrate utilization of various field techniques toward addressing scientific questions in the discipline.
- 5) Conduct basic laboratory experiments utilizing standard observational strategies.

## **TENTATIVE SCHEDULE**

**Tentative schedule** (subject to change)

<b>Week</b>	<b>Topic</b>
1	No lab first week
2	Introduction: Climate (Hancock Hill N and S slopes) – outside
3	Plant Adaptations – outside
4	Animal Adaptations-outside
5	Population Ecology (cemetery demography) – outside
6	Mutualism (pollinators) – outside
7	<b>Lab practical #1 March 1</b>
8	Competition (microbial) – inside
Spring Break	
9	Predation (shrike larder) – outside
10	Facilitation (nurse plants)– outside
11	Parasitism (creosote and gall wasps)– outside
12	Herbivory (harvester ants)– outside
13	<b>Lab practical 2 April 19</b>
14	<b>Epic optional Big Bend Weekend Field Trip! April 28-30</b>
14	Disturbance and succession (grazing) - outside
15	Community ecology (Davis Mountains) - outside
16	<b>Lab practical #3 *last day of class for us (May 3)</b>

*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.*