

## Syllabus BIOL 3137

### Ecology Lab

Fall 2025

**Meeting Time:** Wednesday (Section 001) 2-4:50pm, Thursday (Section 002) 2 pm – 4:50pm

**Location:** BEP 124

**First Day of Class:** Thursday, August 28th

**Last Day of Class:** Thursday, December 4<sup>th</sup>

### Instructors:

**Dr. Jon Seal**

**Professor**

**Office:** BEP 264

**Email:** [jseal@uttyler.edu](mailto:jseal@uttyler.edu)

**Phone:** (903) 566-7126

**Office Hours:** Monday and Friday 1-2:30p,  
or by appointment

**McKenzie Adkins**

**TA, Department of Biology**

**Office:** BEP 257

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**Office Hours:** W 11:30p-1:30p, TH 12:30p-1:30p, or by appointment

**Course Description:** This laboratory course focuses on how animals interact with each other as well as with their environment and how we can scientifically study the natural world by looking at these interactions. The goals of this laboratory course are for students to be able to understand those animal/environment interactions and to be able to apply statistics to test hypotheses about the interactions. The curriculum will emphasize the scientific method and hands-on activities.

**Student Learning Objectives:** By the end of the class, you should be able to...

- 1) Understand what a hypothesis is, and formulate your own hypotheses
- 2) Understand the steps of the scientific method and be able to follow them systematically
- 3) Present scientific results in a concise and informative format
- 4) Recognize and understand ecological interactions

**Evaluation:** Students will be evaluated based on the following work:

1. Participation is worth 5% of your grade. This will include keeping up with readings, attendance, and actively participating in class discussions.
2. Two lab reports, **each** worth 20% of the final grade.
3. Weekly lab assignments will be worth 10% of your grade.
4. Examinations. One midterm (20%) and a final exam (25%) will be given. **In the event you wish to dispute an exam question, an essay outlining your argument must be submitted within one week of the exam being handed back.** Your written appeal should be based on course materials and should stress the scientific validity of your original response.
5. We will follow a 10-point scale for grading:

90-100% = A

80-89% = B

70-79 = C

60-69% = D

0-59% = F

**Participation:** You are required to be on time in the lab every day and to stay the entire time until the instructor lets you go. The instructor will also monitor your participation within your lab group.

**Lateness/Leaving Early/Absence:** You are required to be at lab on time every class period and to stay the entire class period. Failure to do so may result in a loss of points up to and including all of the day's participation points and all of the points on all assignments that were handed in that day. Absences will be excused at the instructor's discretion and there must be documentation.

Valid excuses include a sporting or other university-related event, a death in the family, or an illness affecting yourself or someone you must provide care for (such as a spouse or a child). Car troubles may sometimes be excused at my discretion, provided there is documentation from a police official (such as an accident report) or a mechanic's shop that covers the dates in question. Valid excuses *do not* include oversleeping or work schedule problems. If you miss class because you or someone you provide care for was ill, you must provide a doctor's note listing the dates affected. This means you or your loved one will need to visit the doctor on the day you are absent (or earlier) so that you can get a doctor's note.

**Lab Reports:** There will be two lab reports during the course of the semester, worth 100 points each. The format of the lab reports will be explained in lab. Please follow this format carefully. The goal is to write a formal scientific paper where you set up the hypothesis, explain your methods, concisely present your results, and discuss your findings as they relate to the hypothesis. Just like the lab assignments, each person is expected to write their own lab report, in their own words. You are allowed to work together and come up with answers together, but each person must write everything out on their own and in their own words. People who hand in identical or nearly identical lab reports will receive a 0 for the assignment as plagiarism is not tolerated. You are not allowed to share your lab report with others in your group and ask them to change the wording. This is still considered plagiarism.

**Academic integrity:** Cheating or any other type of academic misconduct will be reported to the university administration, and at minimum will result in failure of the course.

**Weekly Lab schedule (subject to change):**

08/28 Syllabus/Hubbard Brook (Laptop)

09/04 Phenology (Laptop)

09/11 Population Variation (outside)

09/18 Population Genetics (outside)

09/25 Human Demography (off campus)

10/02 **Open Lab** - ask questions about lab report 1, study for Midterm

10/09 **Lab report 1 due, Midterm Exam**

10/16 Landscape Ecology

10/23 Population Dynamics (outside)

10/30 Inter/Intra Species Competition

11/06 Aquatic/mussel Lab (Gilley Creek or Sabine River)

11/13 Aquatic/mussel Lab Sample ID

11/20 **Open Lab** - ask questions about lab report 2, study for Final

11/27 **No Lab**- Thanksgiving break

12/04 **Lab report 2 due, Final Exam**

12/11 **No Lab** - Finals week in lecture courses