

BIOL 3457: General Ecology Lab Syllabus Spring 2016

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Office hours: Wednesday 9am-12pm, or by appointment

Time and Place of Meetings

Mondays 2-4:50 or Wednesdays 2-4:50 in LS 129

Labs begin on February 8, 2016

Course Description

An examination of the theoretical and experimental aspects of the relationship between the biological and physical environments (organisms, food, space, and time) at the individual, population, community, and ecosystem levels. Prerequisite: BIOL 1441, 1442.

Textbooks and Required/Recommended Materials

- *Biology 3457: General Ecology Laboratory Manual. Walsh and Walsh. Version 2016.01.SP16*
The manual is required for the course. It is only available for purchase from a representative of Phi Sigma. Your lab instructor will provide details on obtaining your manual.
- Laptops with Microsoft Office® and internet access are **highly recommended** for labs and should be brought to each meeting

Important Dates

- First day of labs: February 8nd
- Census date: February 3th.
- Last day to drop a class with a "W": April 1st
- Last week of labs: April 18th *unless there is a lab cancellation due to inclement weather, in which case the week of April 25th will be the last week.*

Student Learning Outcomes

- Learn proper techniques for collecting, analyzing, and presenting ecological data
- Further develop scientific writing skills that were introduced in prerequisite courses
- Present and explain experimental results in graphical and written formats
- Enhance critical thinking skills through development and design of experiments and analysis of scientific results
- Ability to work as a team; demonstrated leadership, sensitivity to others, and ability to equally distribute work amongst group members

Assessments

The lab grade will make up 30% of the final course grade and will consist of the following. All of the assignments should be completed on your own except those indicated as group work (Proposal and Demography).

Category	Assignment	Points
Lab Report (60%, 30% each)	Daphnia Paper	100
	Plant Competition	100
Assignments (30%)	Quizzes (4 total)	10 each, 40 total
	Proposal (group assignment)	10
	Primary Literature	20
	Peer Review	20
	Writing Reflection	10
	Writing Improvement WS	10
	Demography Follow-up Questions (group assignment)	20
	Terrestrial/Aquatic Ecology Follow-up Questions	20
Participation (10%)		5 each, 50 total

NOTE: A portion of your lecture final exam will include material covered in lab, including (but not limited to) protocols, follow-up questions, scientific writing, and results/conclusions of experiments.

Outdoor Labs

Labs will focus on learning important techniques in ecological data collection and analysis. This will include two outdoor labs. If you will require special accommodations in order to fully participate in these outdoor activities it is your responsibility to notify your instructor no later than the end of the second week of labs (February 19th). Labs will be conducted rain or shine unless severe weather is expected. Plan to go outside (wear appropriate attire on those days) unless otherwise instructed by your instructor. Students who are not dressed appropriately will not be allowed to participate and will receive a reduced grade on associated assignments and a participation grade of zero for that day.

Expectations

Attend every lab and participate in experiments and exercises. Show up prepared by reading the upcoming laboratory exercise and reviewing the previous lab. Turn in all assignments on time in the required manner and format. Failure to do so will result in a reduced course grade.

In addition, it is expected that all students will:

1. Be respectful of instructors and peers at all times.
2. Put away all electronic devices during class unless they are being used for a lab activity. Texting will NOT be tolerated in class at any time.
3. Adhere to all rules and regulations regarding safety conduct in the lab. This includes wearing proper attire (long pants, socks, and sneakers or hiking shoes for outdoor labs) as instructed. Failure to do so will result in dismissal from lab for the day and may affect your grade.
4. Place all belongings such as bags, coats, and electronic devices in the coat area upon arrival to lab.

5. By enrolling as a student at UTA, you have agreed to abide by the University's Honor code. Ultimately, it is your responsibility to ensure that you abide by this promise and uphold the integrity of UTA. If you are unsure if your assignment contains plagiarism, it is your responsibility to meet with your GTA to get help prior to submitting the assignment.

Grading Policy

3457 is a four-credit class that includes a lecture and a laboratory. For grading purposes, the lecture comprises 2/3 of your grade while other 1/3 is your lab grade. Therefore, you can multiply your final lecture grade by 0.67 and your lab grade by 0.33 and add them together to get your complete course grade.

- You are not permitted to drop either the lecture OR laboratory. Drops and withdrawals will be applied to both.
- Group work does not mean that one person does the assignment and everyone gets the grade. If your instructor feels confident that you did not participate in a group assignment, you will receive a reduced grade or a grade of 0.
- Although there are no exams given during lab, be aware that material covered in lab (including protocols, procedures, methods of data analysis, scientific writing) will be included on your final lecture exam.
- Course policy prohibits extra credit in any form.

Attendance Policy

At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, the following policies apply:

1. **Attendance is mandatory.** You will be required to sign in at the beginning of class.
2. Students who are more than 15 minutes late to class will be considered absent.
3. Each unexcused absence from lab will result in a participation grade of 0 for that lab.
4. On days when appropriate attire is required (i.e. outdoor activities), students not wearing long pants, sneakers or hiking shoes, and socks will not be allowed to participate and will be counted as absent.
5. An unexcused absence will result in a grade reduction of 10% on any associated assignments, including lab reports.
6. If you must miss a lab, contact your lab instructor **prior to** the absence. You will only be permitted to make up missed work with a legitimate, **documented** excuse (such as a medical excuse in the form of a physician's note, death in the immediate family, illness of a family member for which you are the primary care provider). Conflicts with work or volunteering, absences due to a planned trip, or holidays/events not recognized by the official University calendar will not be excused. Extreme circumstances will be considered on a case-by-case basis.
7. If you are **unable** to contact your instructor prior to missing class (due to sickness, accident, etc.), you must notify him/her of the cause of the absence within 24 hours of the missed lab. Absences brought to the attention of the instructor after this time will not be considered excused regardless of reason or documentation.

8. If you missed a lab with an **excused** absence, make-up assignments are due by the original due date or the date established by your instructor. Contact your instructor about missed assessments and instructions on turning in assignments. Group work from exercises missed with an excused absence must be made up individually. There is no make-up for missed participation points regardless of excuse.
9. Documentation of an excused absence **MUST** be provided to your lab instructor by the following week's lab. If you do not provide documentation, you will not be given credit for any make up work you were allowed to do. Students missing lab for unexcused reasons will not be allowed to make up work. Make up work must be completed within 1 week of the student's receipt of the make-up assignment.

Assignment Submission Policies

1. You must follow submission guidelines in order to receive full credit.
2. All assignments must be submitted to SafeAssign. Paper or e-mailed versions will not be graded.
3. Late assignments will be accepted up to 3 days (72 hours) past the due date/time (except the group proposal). A grade reduction of 10% will be applied for each day that an assignment is late. Assignments will not be accepted once the 3 day grace period has expired. There is no grace period for your presentation.
4. Assignments submitted after the final due date, or those incorrectly submitted, will not be accepted and will receive a grade of 0.
5. It is your responsibility to submit all assignments correctly and on time. Except in the case of documented campus technical difficulties, you will not be given extra time to submit electronic assignments in the case of computer-related issues. In other words, don't wait until the last minute to submit assignments! Plan to submit all electronic assignments the day *before* they are due.
6. It is recommended that you take a screen shot of successful electronic submissions. Complaints of missing submitted assignments will not be considered without documentation.
7. Do not turn in work that has been completed and submitted for a different class, you will be reported to student conduct.
8. Plagiarized papers or those that demonstrate evidence of collusion will receive a reduced grade or a grade of 0, **and will be reported to the Office of Student Conduct.**

Quizzes

Quizzes are intended to help you prepare for the lab portion of your final exam. As such, you should plan to spend time studying for them. Quizzes will be given at the start of lab and material covered will include information for the current lab through its prelab (if present), as well as all material covered in previous labs (prelabs, protocols, follow-up questions). Question format will be short answer, fill-ins, and definitions. Quizzes will be given at the start of lab. If you arrive late (i.e., after the quiz has been handed out), you will not be allowed to take the quiz. Make-up quizzes will not be given in the case of unexcused absence or tardiness.

Group Work

Teamwork is one of the primary learning objectives of this course. As such, each group member is expected to participate equally in lab activities. The participation grade will be determined by attendance,

active engagement in lab, and contribution to group assignments and activities. Students who do not actively participate in lab activities and group work will receive a reduced grade or a grade of zero for participation on those days.

Prelabs and Follow-up Questions

Prelab assignments and the Follow-up Questions that appear in the laboratory exercises are meant to help you learn the material. It is very important that you complete these assignments. Prelabs are to be completed individually **prior** to lab, unless indicated otherwise in the manual. Note that Follow-up Questions will be collected only as part of the Demography assignment and the Aquatic/Terrestrial assignment. The others are meant to help you prepare for assignments and quizzes. If you need help with the material addressed by the questions you should seek help from your instructor.

IMPORTANT UNIVERSITY POLICIES

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/aao/fao/>).

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Title IX: The University of Texas at Arlington is committed to upholding U.S. Federal Law "Title IX" such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

Academic Integrity: Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

The English Writing Center (411LIBR): Hours are 9 am to 8 pm Mondays-Thursdays, 9 am to 3 pm Fridays and Noon to 5 pm Saturdays and Sundays. Walk In *Quick Hits* sessions during all open hours Mon-Thurs. Register and make appointments online at <http://uta.mywconline.com>. Classroom Visits, Workshops, and advanced services for graduate students and faculty are also available. Please see www.uta.edu/owl for detailed information.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located at the end of the hallway. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

Lab Safety Information

The following safety rules will be enforced at all times.

1. There is absolutely no food, drink, gum, cosmetics permitted in the lab at any time.
2. All personal materials, other than your lab manual and a pen/pencil (or other materials required for that day's lab) must be stowed in the designated area. This includes all bags, coats, electronic devices, and other personal belongings.
3. Using electronic devices, other than those required by the activity, during lab may result in your dismissal from lab that day and will affect your grade. If you have an extenuating circumstance during lab (e.g., sick child) notify your instructor prior to the start of lab that you need to have your phone.

Mandatory University Online Safety Training

Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

Completion of the Laboratory Safety Training is required **BEFORE** you begin your coursework. Training must be completed one business day before your scheduled lab meeting to ensure that the instructor has up-to-date completion records.

Lab Safety Training Course Instructions

1. Use Mozilla Firefox 3.0 as your web browser: <https://www.mozilla.org/en-US/firefox/new/>
2. Login to Blackboard at **<https://elearn.uta.edu>** with your NetID and password
3. Under My Blackboard tab, click Lab Safety Training

Note: Tab will be present if training is required

4. Click Welcome from the left pane to start and follow the instructions

You MUST complete this training. Students who have not completed the training by the third week of lab will be unable to attend lab and may be dropped from the lab (and consequently the lecture).

General questions about the Lab Safety Training, including content should be directed to the Office of Environmental Health and Safety at (817) 272-2185 or ehsafety@uta.edu

General Ecology Lab Schedule Spring 2016

Week	Topic	Activity	Assignments Due
Feb 8	Evolution	Lab 1: <i>Natural Selection in Galapagos Finches</i>	
Feb 15	Scientific Writing	Lab 2: <i>Scientific Writing</i>	
Feb22	Organisms and the Environment	Lab 3: <i>Daphnia Responses to Environment Experiment</i>	Quiz 1: Plagiarism (on Bb) Primary Literature Assignment
Feb 29	Competition Introduction	Lab 4: <i>Plant Competition, Part I: Experiment Set-up</i>	Group Proposal Quiz 2
Mar 7	Peer Review	Lab 5: <i>Scientific Writing Improvement Workshop</i>	Daphnia Paper Draft
Mar 14	Spring Break	No Labs	
Mar 21	Demographics	Lab 6: <i>Population Demography and Life Tables</i> **Harvest Plants Today!**	Daphnia Final Paper Writing Reflection
Mar 28	Inter and Intraspecific Competition	Lab 7: <i>Plant Competition, Part 2: Data Collection and Analysis</i>	Demography Follow-up Questions (group)
Apr 4	Predator Prey Dynamics	Lab 8: <i>POPULUS Competition and Predator Prey Simulations</i>	Quiz 3
Apr 11	Terrestrial Ecosystems	Lab 9: <i>Terrestrial Ecology: Spatial Distribution</i> Outdoor activity- appropriate dress required!	Plant Competition Final Paper Paper Improvement Worksheet
Apr 18	Aquatic Ecosystems	Lab 10: <i>Aquatic Ecology: Stream Health</i> Outdoor activity- appropriate dress required!	Quiz 4
Apr 25		<i>No lab except in case of a cancellation due to inclement weather</i>	Terrestrial/Aquatic Ecology Follow-up Questions

Note: This schedule may be adjusted in any way that serves the educational needs of the students enrolled in this course or to accommodate a weather cancellation.