# BIOL 3457: Ecology Lab Syllabus

**Instructor:** Professor Melissa Walsh

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Office: LS 461

**Office hours:** Tuesday 12-1, Wednesday 10-12, or by appointment

#### **Time and Place of Meetings**

Tuesdays 2-4:50 or Thursdays 2-4:50 in LS 129

Labs begin on January 28, 2014

#### **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, 2343.

#### **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 7<sup>th</sup>). Labs will be conducted rain or shine unless severe weather is expected. Plan to go outside (wear appropriate attire) unless otherwise instructed by your GTA. Students who are not dressed appropriately will not be allowed to participate and will receive a reduced grade.

#### **Textbooks and Required Materials**

There is no lab manual for this course. All lab exercises and other required materials will be posted to the course Blackboard site. It is the students' responsibility to check Blackboard frequently and to print a copy of the exercise and any supporting materials to bring to lab. <u>Laptops with Microsoft Office® and internet access are highly recommended for labs</u>.

#### **Important Dates**

- First Day of Labs: January 28<sup>th</sup>
- Census Date: January 29<sup>th</sup>. Drops/withdrawals after this must be completed by an academic advisor
- Last day to drop a class with a "W": March 28<sup>th</sup>
- Last day of labs: April 10<sup>th</sup> unless there is a lab cancellation due to inclement weather, in which case the week of April 14 will be the last week.

#### Assessments

The lab grade will make up 25% of the final course grade and will consist of the following:

2 lab reports- 70% (35% each)

1 group oral PowerPoint® presentation – 10%

Participation- 20%

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 participate in the preparation of the group oral presentation, including conducting the experiments, compiling and analyzing data, design of the PPT, and rehearsal with the group, will receive a reduced grade or a zero on the presentation. Students who do not attend lab on the day of the presentations will receive a zero on their presentation.

Although there are no quizzes or 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.

## **Student Learning Outcomes**

- become proficient at collecting, analyzing, and presenting data, in both written and oral formats
- develop critical thinking skills through development and design of experiments, and analysis of scientific results
- learn essential ecological laboratory and field procedures and protocols
- scientific writing skills

## **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 GTAs, undergraduate TAs, and peers at all times.
- 2. <u>Turn off and put away all electronic devices during class. Cell phones will NOT be permitted in class at any time.</u>
- 3. Be attentive to the information and instructions that your GTA provides.
- 4. 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.
- 5. Place all belongings such as bags, coats, and electronic devices in the coat area upon arrival to lab.
- 6. 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 3/4 of your grade while other 1/4 is your lab grade. Therefore, you can multiply your final lecture grade by 0.75 and your lab grade by 0.25 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 GTA feels confident that you did not participate in a group assignment, you will receive a reduced grade or a grade of 0.
- Course policy prohibits extra credit in any form.

# **Attendance Policy**

- 1. Attendance is mandatory. You will be required to sign in at the beginning of class.
- 2. Students who are more than 10 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 or within 24 hours following the missed lab. 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). No absence will be considered excused without appropriate documentation regardless of cause. Conflicts with work will not be considered excused. Extreme circumstances will be considered on a case-by-case basis.
- 7. Documentation of an excused absence MUST be provided to your GTA 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. Late assignments will be accepted up to 3 days (72 hours) past the due date/time. 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.
- 3. Assignments submitted after the final due date, <u>or those incorrectly submitted</u>, will not be accepted and will receive a grade of 0.
- 4. Do not submit a PDF to Safe Assign, it will not be graded and you will receive a 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. Do not submit assignments via email. They will not be accepted.

## **Scientific Writing Assignments**

Scientific writing is a vital component of this laboratory course. You will spend considerable time learning about the process of scientific writing. The laboratory reports are each worth 35% of your grade. As such, you should plan to dedicate significant time to developing your writing skills over the course of the semester.

- 1. Lab reports must be submitted through Safe Assign. A report that is not submitted through Safe Assign will not be accepted and will receive a grade of zero.
- 2. You will be required to submit printed, highlighted sources and the peer review (for report #1) along with your lab report. Lab reports will not be graded until these materials are handed in.
- 3. Plagiarized papers will receive a reduced grade or a grade of 0, and will be reported to the Office of Student Conduct.

#### 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://wwweb.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 <a href="https://www.uta.edu/disability">www.uta.edu/disability</a> or by calling the Office for Students with Disabilities at (817) 272-3364.

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.

**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 <a href="http://www.uta.edu/oit/cs/email/mavmail.php">http://www.uta.edu/oit/cs/email/mavmail.php</a>.

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 <a href="http://www.uta.edu/sfs">http://www.uta.edu/sfs</a>.

**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. Failure to follow safety regulations or instructions regarding safety attire or procedures may result in dismissal from lab or grade reduction.

- 1. There is absolutely no food, drink, gum, cosmetics permitted in the lab at any time.
- 2. You must wear appropriate safety attire as instructed.
- 3. All personal materials, other than materials required for that day's lab, must be stowed in the designated area. This includes all bags, coats, electronic devices, cell phones, and other personal belongings.
- 4. Electronic devices are prohibited during lab and must be turned off and stowed with your belongings. Using electronic devices during lab may result in your dismissal from lab that day and will affect your grade. If you have an extenuating circumstance during lab one day (e.g. sick child), notify your GTA prior to the start of lab that you need to have your phone.

## **Mandatory University Online Safety Training**

- 1. Go to <a href="http://www.uta.edu/training">http://www.uta.edu/training</a>.
- 2. Log on using your network log-on ID and password (what you use to access email). If you do not know your NetID or need to reset your password, visit <a href="https://webapps.uta.edu/oit/selfservice/">https://webapps.uta.edu/oit/selfservice/</a>.
- 3. The available courses for completion will be listed under "Training I'm Enrolled In". Complete the course entitled 'Student Lab Safety Training General.' \*\*\*NOTE: If you completed Wet, Dry or Biology Lab Safety Training course last semester for another class, that training is still applicable until the end of this academic year. Please follow instructions in #4 to print the certification page for your GTA.
- 4. Go to 'Training I've Completed' and verify that it shows clearly your name, and that 'General, Wet, Dry or Biology' training is completed/passed and the date when the training was completed. If you have just completed the training but it is not updated on the 'Training I've Completed' page, please log out of the system and log back in. If the training still does not show up on this page, call the Helpline at 817-272-5100.
- 5. If you were enrolled in a course with a lab last semester and did not complete the training or if you do not see training for this academic year listed, email <a href="mailto:compliance@uta.edu">compliance@uta.edu</a> providing your name, a contact phone number, NetID and course (e.g. BIOL 1441-005) and request the appropriate training for your course.
- 6. You MUST complete this training. Students who have not completed the training by the <u>second</u> week of lab may be dropped from the lab (and consequently the lecture).
- 7. Lab Safety Training is required to be completed once every academic year. Training completed in the Fall semester is valid for the Fall, Spring and Summer sessions. It is your responsibility to complete the training as required.

For training specific questions, contact the Environmental Health and Safety office at 817-272-2185.

For technical assistance with the training, please contact the Office of Institutional Compliance at 817-272-5100 or email compliance@uta.edu

# **Ecology Lab Schedule (Tentative)**

Week	Topic	Activity	Assignments Due
Jan 27	Introduction	Review syllabus and course expectations/outcomes	
	Population Dynamics	Lab 1: Population Growth in Tribolium Research and set up experiment	
Feb 3	Scientific Writing	Lab 2: Scientific Writing, Paraphrasing, and Avoiding Plagiarism Count your Tribolium!*	Paraphrasing Exercise
Feb 10	Evolution	Lab 3: Natural selection in Galapagos Finches	
Feb 17	Estimating population size	Lab 4: Mark/recapture	
Feb 24	Terrestrial Ecology	Lab 5: Methods in terrestrial data collection and analysis  Outdoor activity- appropriate dress required!	
Mar 3	Aquatic Ecology	Lab 6: Stream data collection  Outdoor activity- appropriate dress required!	
Mar 10	Spring Break	No Labs	
Mar 17	Peer Reviewing Manuscripts	Lab 7: Peer review	Bring printed lab report to lab <b>and</b> submit draft to Bb.
Mar 24	Demography	Lab 8: Demography Constructing life tables	Lab report final version due to Bb prior to lab. Printed, highlighted sources due.
Mar 21	Scientific Presentations	Lab 9: Group Powerpoint Presentations	Presentation due to Bb prior to lab.
Apr 7	Population Growth Data Analysis	Lab 10: Collect and Analyze Tribolium Data	
Apr 14	Flex Week	Labs do not meet unless a make-up lab is necessary due to inclement weather during the semester.	Tribolium lab report due to Bb by 5pm on day of lab meeting.

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

<sup>\*</sup>Tribolium will need to be counted at the start of lab each week for the duration of the semester.