Welcome to Ecology Laboratory. The laboratory will offer you hands-on opportunities to examine natural systems, pose ecological questions and then collect, analyze and interpret data. You will learn to write scientific reports including statistical analysis.

Course goals:
1. To learn the basic principles of conducting ecological studies. Success will be measured by your grades on the exam.
2. To develop critical thinking skills, mathematical and analysis skills in relation to biology. Progress will be reflected in your laboratory report grade.
3. To improve communication skills in reading and writing scientific papers. This will be evident in your lab report and assignment grades.

Tools for success:
1. Read the lab before coming to class!
2. Listen to the introductory lecture and take notes (buy and bring a lab notebook!)
3. Participate actively in labs, i.e. be on time, help take data, do analyses yourself, look up papers in the library’s databases
4. Take pride in your work. Write your reports like they were for a job. Proof the final version.

Evaluation Summary:
Lab reports 50% (20% Lab Report Summary/Proposal +30% Lab Report)
Assignments 20%
Exam 20%
Participation 10%.

The lab report summary, final lab report, assignments, exam and participation will each be worth a maximum of 100 points each (500 points total). Approximately 1 month before the final report deadline you will be required to submit a summary of your proposed report including a description of the justification, questions, methods and expected results. This summary should be less than 500 words and fit one page. Do not confuse this summary with the summary required on the final report!

Bring a laptop to class. If you do not have one, please let me know. A laptop or other computer is essential to data analysis. Do not try to analyze data using your phone! You will drive yourself crazy.

Grading Issues. In grading, I strive for fairness and consistency. If you feel like a grading error was made on an exam or assignment, you may submit a typed appeal within a week (7 days) of when the exam or assignment was returned to you. Your written appeal should be based on course materials and should stress the scientific validity of your original response. I do not give extra credit.
Final grades in the course will be determined by a standard grading system
90 – 100% = A 80 – 89% = B 70 – 79% = C 60 – 69% = D < 59% = F

**Assignments.** There will be seven assignments each week where you will answer questions about that day’s lab. The assignment is due the following week. Note there are **seven** assignments that are worth 15 points each or 105 points total. Your assignment grade portion will be graded out of 100 points, however. Thus there are 5 extra points possible. All assignments will be submitted on Canvas by the submission deadline (start of class). **Hard copy assignments will not be accepted.** Learn how to use Canvas and arrange to submit your assignments well before the deadline. Canvas has a 24 hour help line.

**Participation** means attending class, going on all field trips, helping collect data and contributing in class. **It will mean getting dirty if necessary.** If you miss labs, show up late or do not participate during class, wear inappropriate clothing and stay on sidewalks, etc., you will lose these points. You will also lose points if you leave before the rest of your group leaves and they do most of the work. **Be a good citizen and do your share of the group projects.** Be prepared to stay the full 3 hours of the lab. Be on time. Thus, Participation points will total 100 points (but since participation only contributes a maximum of 20% of your grade, a maximum of 20 points will be applied toward your final grade.

**Lab Report:**
Format of written report: There will be one written report during the semester that will account for 50% of your final grade. The Lab Report will be worth a total of 100 points. The topic of the report will either concern 1) transect sampling of three habitats surveyed or 2) demography (comparisons of cemeteries in Tyler). If you want to pursue another topic, please contact me for approval. Follow the format presented in class. This format mimics those written for scientific journal papers and you will lose points if it does not follow that format. All text must be typed (double-space). Number all pages, put your name and lab section on the report. Staple all pages together. Figures need to look like those in a journal. Figures and tables will be evaluated on their content and the information they convey, in addition to correct presentation. Literature cited: you must cite 2-5 pertinent citations from the library or electronically accessed primary literature (**not general web sources** (e.g., Wikipedia)). Although your report should either use the transect or cemetery data, the intellectual content and focus on the paper is up to you and your group. Use your creativity in how to present your data (type of statistics, figures, tables, etc.). The lab report should be 10-15 pages including summary, body (introduction, methods, results and discussion), acknowledgments and references.

Approximately at mid-term you will submit a brief summary/proposal to the project you will investigate for your lab report. This should be 1-2 complete pages (approximately 1 paragraph) and contain an overview of your questions, hypotheses and methods you will present in the lab report.

You may work in small groups (up to three students maximum) on your research project and report but each student is responsible for their individual assignments. Collaboration in science can be fun but it also can be exhausting; organize your group well and establish responsibilities among your team members. If you feel that one or more of your group members is not performing their fair share of the work, let me know as early as possible. Do not wait until the end of the semester. You may work with whomever you feel comfortable working with. You may work alone, you may work with the person next to you or the person across the room from you. The important thing about group projects is that you feel comfortable with whom you are working. If you need assistance, please let me know.
All Lab Report Summaries and Lab Reports will be submitted on Canvas by the submission deadline. **Hard copy Lab Reports will not be accepted.** Learn how to use Canvas and arrange to submit your assignments well before the deadline. Canvas has a 24 hour help line.

**Cheating and plagiarism:** Obviously, this will not be tolerated. Do not copy graphs or tables from other groups, texts or other sources. Draw your own figures. Do not cut and paste anything from the internet! Any contribution from another individual must be credited in the text. **Reports that are copied will be assigned a 0.** This will likely mean you receive an F in the class. You will also be reported to University Governance and could be suspended from school.

**Deadlines/Make up Exams:**
1. Make-up assignments/exams will not be given except in the case of family emergency or with an excuse from a medical doctor. In such cases, you must contact your instructor as soon as possible.
2. Any absences due to sanctioned university activities (e.g., intercollegiate meets) require an official and PRIOR arrangement with your instructor.

**Course safety:** Please be aware of the safety guidelines for all laboratory classes. Students are REQUIRED to go outside for the laboratory exercises. Please dress appropriately and bring water and/or a snack if you think you need it. Lack of participation because of inappropriate clothes and/or shoes will hurt your grade. Appropriate dress might include wearing pants, a long-sleeved shirt, a hat, and old shoes or boots that you do not mind getting dirty. Plan on getting dirty (that’s the fun part about this job). You may also opt for insect repellent or sunscreen. Check the weather for the day of class. Unless it is a complete downpour, lab will not be cancelled. Thus, if light rain is expected, bring a rain coat or any other rain gear you may need. There are inherent risks one assumes when one goes outside, which cannot be controlled by the instructor or the University. Students should be aware that vehicular traffic, poison ivy, ticks, mosquitoes, or biting and stinging insects (bees, wasps, etc.) among others, are all PERSONAL safety issues. Please contact me privately at the START of the course to discuss your specific needs if you believe you need course accommodations based on the impact of a disability, medical condition, or if you have emergency medical information to share. **Bring water with you on the field trips.**

**REminder:** time in the field is still class time, i.e. no smoking (including e-cigarettes) no cell phone use or other activities you would not do in a lab.

**Disability:** If you have a disability, including a learning disability, for which you request disability support services/accommodation(s), please contact Ida MacDonald in the Disability Support Services office so that the appropriate arrangements may be made. In accordance with federal law, a student requesting disability support services/accommodation(s) must provide appropriate documentation of his/her disability to the Disability Support Services counselor. In order to assure approved services the first week of class, diagnostic, prognostic, and prescriptive information should be received 30 days prior to the beginning of the semester services are requested. For more information, call or visit the Student Services Center located in the University Center, Room 282. The telephone number is 566-7079 (TDD 565-5579). Additional information may also be obtained at the following UT Tyler Web address: http://www.uttyler.edu/disabilityservices. It is the policy of the University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number.

**Grade Replacement.** If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the 12th day of class. Failure to file intent to use grade
forgiveness will result in both the original and repeated grade being used to calculate your overall grade point average.

HONOR CODE/ ACADEMIC INTEGRITY: Students should be aware that absolute academic integrity is expected of every student in all undertakings at The University of Texas at Tyler. Failure to comply can result in strong university-imposed penalties. Plagiarism (copying the work of others without proper citation), talking during test time, having mobile electronic devices on (cell phones, PDA’s, laptops) during exams are some examples of behavior to be avoided.

UT Tyler Honor Code
Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

Be forewarned that while taking an exam, the possession of anything containing course content will be considered cheating, whether or not you actually refer to it during the exam. TALKING during an EXAM to anyone other than the instructor or proctor will automatically be considered cheating. It does not matter what you were talking about. This includes the use of cell phones (even if they call YOU) or any other electronic device that could be used to record test material. Violation of this policy will be considered cheating and treated accordingly. Penalties for cheating include anything from a zero on the exam or quiz during which the cheating occurred, up to an F for the course in question.

You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give and receive “consulting” help. However, this permission to cooperate should never involve one student having possession of a copy of all or part of work done by someone else, in the form of digital or hard copy. If copying occurs, both the student who copied the work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. Penalty for violation of this Code can also be extended to include failure of the course and University disciplinary action. See more below under ‘Student Standards of Academic Conduct’

EXAMS: It is your responsibility to arrive at the exam on time. All exams will be held in our regular classroom. Students who arrive late will not be given additional time, and anyone arriving after other students have finished and left will not be permitted to take the exam.

Failing to take a scheduled examination or assignment will result in a score of 0 unless replaced by a make-up exam or assignment in a timely fashion. ‘Make-up’ examinations or assignments are given only in cases where there is a documented excuse beyond your reasonable control:

- Illness – you must have a physician note indicating that you were not in a physical condition to take the exam at the scheduled time. A note from a family member is insufficient.
- Death or grave illness in your immediate family.
- Significant scheduling conflicts (e.g., med-school interviews, or other university sponsored events). You must notify the instructor at least 2 weeks in advance of this absence.

The nature of the make-up exam will be decided by the instructor and may consist of a written and/or oral examination.

UNIVERSITY POLICIES

STUDENT ABSENCE FOR UNIVERSITY-SPONSORED EVENTS AND ACTIVITIES
If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.
**RELIGIOUS HOLY DAYS:** Religious holy days sometimes conflict with class and examination schedules. The University policy is that students who miss course work due to the observance of a religious holy day must be given the opportunity to complete the work missed within a reasonable time after the absence, provided that the instructor is notified in advance. Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

**DISABILITY SERVICES**
In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria applies to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu

**STUDENTS RIGHTS AND RESPONSIBILITIES:** To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: http://www.uttyler.edu/wellness/StudentRightsandResponsibilities.html

**SOCIAL SECURITY AND FERPA STATEMENT:**
It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

**EMERGENCY EXITS AND EVACUATION:**
Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do Not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

**UT Tyler a Tobacco-Free University**
All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kretes, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.

**Campus Carry**
We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. Please be aware that many research and teaching laboratories in the Department of Biology are approved Exclusion Zones. Be alert to signage throughout the HPR and BEP buildings. More information is available at http://www.uttyler.edu/about/campus-carry/index.php
Students Rights and Responsibilities
To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: http://www.uttyler.edu/wellness/rightsresponsibilities.php

Grade Replacement/Forgiveness and Census Date Policies
Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. (For Spring 2017, the Census Date is January 30.) Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.uttyler.edu/registrar. Each semester’s Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date (30 January 2017) is the deadline for many forms and enrollment actions of which students need to be aware. These include:
- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

State-Mandated Course Drop Policy
Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date). Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

Student Standards of Academic Conduct: Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

(i) “Cheating” includes, but is not limited to:
- copying from another student’s test paper;
- using, during a test, materials not authorized by the person giving the test;
- failure to comply with instructions given by the person administering the test;
- possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed “crib notes”. The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;
• using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
• collaborating with or seeking aid from another student during a test or other assignment without authority;
• discussing the contents of an examination with another student who will take the examination;
• divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;
• substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
• paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;
• falsifying research data, laboratory reports, and/or other academic work offered for credit;
• taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
• misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.

(ii) “Plagiarism” includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another’s work and the submission of it as one’s own academic work offered for credit.

(iii) “Collusion” includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.

(iv) All written work that is submitted will be subject to review by SafeAssign™, available on Blackboard.

UT Tyler Resources for Students:

• UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu, http://www.uttyler.edu/writingcenter/
• UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu, https://www.uttyler.edu/tutoring/
• The Mathematics Learning Center, RBN 4021, This is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
• UT Tyler Counseling Center (903.566.7254) https://www.uttyler.edu/counseling/
Please be aware that this is a tentative schedule. Unforseen events (extreme thunderstorms, ice/snow storms, late spring leaf flush) may cause changes in this schedule. Changes will be announced in class and on Canvas.

**Important Dates:**

January 28: Census Date  
March 11-16: Spring Break  
April 1: Withdrawal Date  
May 4: End of Term

<table>
<thead>
<tr>
<th>Week of</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 14</td>
<td>Introduction</td>
</tr>
<tr>
<td>Jan 21</td>
<td>Hypothesis Testing I</td>
</tr>
<tr>
<td>Jan 28</td>
<td>Hypothesis Testing II</td>
</tr>
<tr>
<td>Feb 4</td>
<td>Ecological Statistics I (Descriptive, Parametric vs. non parametric)</td>
</tr>
<tr>
<td>Feb 11</td>
<td>Sexual Selection Lab</td>
</tr>
<tr>
<td>Feb 18</td>
<td>Ecological Statistics II (ANOVA, regression, multivariate)</td>
</tr>
<tr>
<td>Feb 25</td>
<td>Landscape Ecology (Campus Walk)</td>
</tr>
<tr>
<td>March 4</td>
<td>Life Table Analysis (Cemetery Lab)</td>
</tr>
<tr>
<td>March 11</td>
<td>Spring Break (No Class)</td>
</tr>
<tr>
<td>March 18</td>
<td>Data analysis (tables, figures, etc.) (Hubbard Forest Laboratory Exercise)</td>
</tr>
<tr>
<td>March 25</td>
<td>Ecological Sampling of Terrestrial Habitats/Communities (Transect Sampling of Campus Forest Woody Species) <strong>Lab Report Summary (Proposal) Due</strong></td>
</tr>
<tr>
<td>April 1</td>
<td>Exam</td>
</tr>
<tr>
<td>April 8</td>
<td>Lab Reports (transect sampling or another cemetery)</td>
</tr>
<tr>
<td>April 15</td>
<td>Lab Reports (transect sampling or another cemetery)</td>
</tr>
<tr>
<td>April 22</td>
<td>Lab Report Due</td>
</tr>
</tbody>
</table>