

SYLLABUS BIOL 3336 – ECOLOGY**SPRING 2024**

PROFESSOR: Marsha Williams, HPR 107 or BEP 129 (Main Biology Office), Phone – 903-566-6194, Email: mwilliams@uttyler.edu
Office Hours: M 1-3 p.m.; W 1:00 -2:00 p.m., or by appointment

CATALOG DESCRIPTION: Study of the interrelationships of plants and animals with the environment. Co-requisite: BIOL 3137. Prerequisites: BIOL 1306/1106, BIOL 1307/1107.

COURSE OBJECTIVES/STUDENT LEARNING OUTCOMES

1. Develop the ability to evaluate scientific inquiry on issues in the field of Ecology.
2. Learn how organisms interact with each other and with the natural world.
3. Understand the structure and function of different types of ecosystems.
4. Learn techniques for gathering, analysis and interpretation of data, including how to present scientific information in figures and tables.
5. Develop an understanding and appreciation of the importance of the natural world in their own personal lives.

REQUIRED TEXTS: Marchetti, M.P., J.L. Lockwood, and M.F. Hoopes. 2023. Ecology in a changing world. W.W. Norton & Company, Inc. New York, NY.

EVALUATION: Students will be evaluated based on the following work:

1. Participation **15%**. This will include keeping up with readings, attendance, and actively participating in group presentations.
2. Group Presentations: Two group presentations (**10%** of final grade each) will be given during the semester on assigned topics that reenforce learning of course material.
3. Examinations. Two midterms will be given. Each will be worth **20%** of the final grade. *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.
4. Final Exam. The final exam will be worth **25%** of the final grade and will be comprehensive. This exam will also include any information covered after Exam 2.
5. We will follow a 10-point scale for grading, I will only round up when you are sitting at 0.5 or greater (e.g., 79.5 would round to 80):
90-100% = A 80-89% = B 70-79 = C 60-69% = D 0-59% = F

SUPPLEMENTS: Illustrations, announcements, and PowerPoint presentations will be available on Canvas immediately following each lecture. Students should actively listen and take notes in lecture for optimal performance in this class. These materials are strictly for your own use, and are not to be disseminated to anyone else, under any circumstances. Lectures will be supplemented with films shown during class. These will provide new information or reaffirm the information presented in lecture. Both lectures and supplements represent testable material.

TENTATIVE CLASS SCHEDULE

Lecture Topics (Ch)

Ecology in the Anthropocene (Introduction) (1); Quantitative Reasoning (2) Global Climate and Biomes (3); Evolution and Speciation (4); Individuals: Physiology and Behavior (5)

February 16th – Exam 1

Populations (6); Competition (7); Exploitation (8); Mutualism and Facilitation (9); Multispecies Interactions and Food Webs (10)

March 22nd – Exam 2

Biodiversity (11); Spatial Dynamics (12); Communities through Time (13); Nutrient Cycling and Ecosystem Services (14); Anthropocene Ecology (15)

Final Exam TBA

IMPORTANT DATES:

1/15 Martin Luther King, Jr. Holiday (No class)

1/29 Census Date

3/11 - 15 Spring Break (No classes)

3/25 Last Day to Withdraw

4/29-5/3 Final Exam Week*

*Final Exam in Ecology TBA when exam schedule becomes available.

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.

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 will result in a score of 0 unless replaced by a make-up exam in a timely fashion. 'Make-up' examinations 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.