BIOL 2140.003 and 004 – Principles of Ecology

3 credits (Tues/Thurs 12:30-1:50 PM) – Spring 2026
Location: GAB 104

Instructor: Dr. Jim Bednarz
Office: LIFE A128-C
Tel: 940-369-5142

Office Hours: Mon 2:00 – 3:00 pm,
Tues 11:00 am – 12:00 pm,
Thurs 11:00 am – 12:00 pm,
or by appointment

Email: james.bednarz@unt.edu (the best way to contact me)

Office Hours: If possible, please send me a brief e-mail before you intend to visit during my office hours and give me the specific time of your planned visit and if you want to visit in-person or by Zoom. I will respond by e-mail verifying that I am available or suggest an alternative time, as well as verify whether the meeting will be in-person or virtual. **I do encourage you to visit during my office hours to ask questions or discuss ecology.**

Required Text: Ecology: The Economy of Nature by R. Ricklefs and R. Relyea, 10th edition. W.H. Freeman and Company. ISBN:9781319524838 E-book and access to Achieve; $99.99

- To get access to Achieve (Macmillan Learning Platform) go to our Course Canvas Site and click on "Macmillan Learning"

Course information on CANVAS: https://unt.instructure.com/login/ldap

Course Objectives: To provide a strong foundational knowledge about key ecological concepts and explore sub-disciplines within the field. We also will examine how ecological scientists employ the scientific method to study animal and plant populations, interpret patterns, and investigate the processes that produce ecological patterns. In addition, students will be introduced to scientific writing and the ecological literature.

Flexibility Statement: This syllabus provides a plan for the execution of this course; however, because of potential unforeseen events or opportunities, the instructor reserves the right make some reasonable adjustments in the schedule of topics, the material covered, or other aspects of this course. Students will be notified of any such adjustments well in advance.

Course Requirements and Grading:
Your grade in the course will be based on four lecture exams, one written assignment, completion of on-line homework assignments, and class participation. Grading will be based on the following:

Exams (multiple choice)	300 pts (100 pts each)
Final Exam (multiple choice)	150 pts (new material and cumulative concepts)
Written Review Assignment	150 pts
Achieve Homework Assignments	100 pts
Participation (iClicker Polling)	100 pts
Total	800 pts

The following scale will be used to determine the "letter grade" received in the course:

90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; < 60% = F

The lowest regular (100 pt) exam score will be dropped for students that have no more than 2 unexcused absences. All three 100-pt exams will contribute to the final grade for students that have more than 2 unexcused absences. Students are required to take all 4 exams to be eligible to drop the lowest 100-point exam score.

iClicker Cloud POLLING: Engagement, participation, and interaction are important elements of the learning process. To that end, we will be using iClicker Cloud Polling, so each student must be registered to iClicker Cloud and have a device (computer, smartphone or tablet) for polling responses in this course.

You may use your own smartphone or tablet by downloading the iClicker Cloud app – available for iOS and Android.

1) You will need to download the iClicker Cloud App on your device from the App store.

2) You will need to create an account with iClicker Cloud, enter your EUID in the *Student ID* (*optional*) space, select University of North Texas as your institution, and search for each course in which you will use iClicker Cloud. Visit: https://www.iclicker.com/students/

This course is listed as follows: SP26 BIOL 2140.003 - Bednarz

Add this course to your iClicker Cloud course list. Click on the course and JOIN when we are in session. Connecting via wifi in UNT classrooms is a must.

Grading: You will receive 1 point for each answer recorded (participation) and an additional 1 point for each correct answer for a total of 2 points possible per question. Responses to questions posed for which there is no right or wrong answer will receive 1 point for participation. Therefore, you are **receiving credit for participating** and **additional credit for answering correctly**. You are not permitted to participate in polling if you are not present in class, without the expressed permission of the instructor. Attempts to participate in polling when absent from class are acts of **academic dishonesty** and any student involved in this form of academic misconduct will receive **zero out of 100 points** for their course polling grade. **Note:** During the course of the semester, you will have the potential to earn well over 100 points based on polling in iClicker (an estimated 180-190 points). Your participation points will be scaled to a maximum of 100 points by calculating the percentage based on the points earned/total possible points.

Attendance Policy: To learn the material, it will benefit you greatly to attend class, because most of us learn through multiple modalities: visual, tactile, and auditory. When you attend class, you have the benefit of seeing, writing, and hearing the material, as well as the ability to ask questions and hear your peers ask questions. Please note that, I will take attendance and monitor your participation. If you do not attend class, you are still responsible for all material covered during that class meeting and you will receive a zero (0) for missed participation points (answering iClicker Cloud Polling questions), or any missed assignment. **If you have more than 2 unexcused absences, you are not eligible to drop your lowest regular exam score.** From past student performance, I have determined that class attendance is essential for students to successfully pass this course. **Therefore, a student that has more than 6 unexcused absences through the course of the semester will receive an automatic "F" in this course.**

Make-up exams will only be allowed for valid medical reasons or official school activities, in which case a verifiable written excuse is required. Students who have a valid reason for missing an exam may PRE-ARRANGE (before the exam) a date for taking the make-up exam. If a student misses an exam without making arrangements prior to the exam date, or misses the arranged make-up exam, the student will receive a zero grade for that exam. **The instructor has the option of choosing a different test format for the make-up exam.** If you are sick or in quarantine during an exam date, I will re-schedule your in-person exam when you are well and out of quarantine.

Students are expected to attend class meetings regularly and to abide by the attendance policy described above. It is important that you communicate with me, the professor, prior to being absent, so that we can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform me by e-mail if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community.

If you are experiencing any symptoms of COVID-19 please seek medical attention from the Student Health and Wellness Center (940-565-2333 or ask SHWC@unt.edu) or your health care provider PRIOR to coming to campus.

Face Covering: Use of face coverings and masks are a matter of personal choice.

Formal Written Assignment: For this assignment, you will select a topic or question of interest to you related to the field of Ecology and write a professional review paper based on at least 10 references, of which at least 6 sources must be from peer-reviewed scientific literature. Specific details concerning the assignment will be available on CANVAS.

Honors Student Requirement (BIOL 2140.004): During the week of 27 April – 30 April, I will schedule a time outside of class for each Honors student to present an oral or Power Point-type presentation describing and illustrating the results of their review paper. This presentation should be between 6-7 min in length and I will then provide some time for the audience to ask presenters questions. The effectiveness of your oral presentation will be evaluated and feedback will be provided to all students. Satisfactory completion of the oral presentation will earn students Honors Credit for BIOL 2140.

Disabilities Accommodation: The University of North Texas complies with Section 504 of the 1973 Rehabilitation Act and with the Americans with Disabilities Act of 1990. The University of North Texas provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please register with the Office of Disability Accommodation to verify eligibility as soon as possible to avoid any delay in implementation. Students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at https://studentaffairs.unt.edu/office-disability-access

Academic Dishonesty: Students caught cheating or plagiarizing will receive a "0" for that particular assignment or exam. Additionally, the incident will be reported to the Dean of Students, who may impose further penalty. According to the UNT catalog, the term "cheating" includes, but is not limited to: (a) use of any unauthorized assistance in taking quizzes, tests, or examinations; (b) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports (use of ChatGPT in writing review papers is a violation), solving problems, or carrying out other assignments; (c) the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university; (d) dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor; (e) use of ChatGPT or other AI technology to compose the written ecology review paper or other assignment, unless approved by the instructor; or (f) any other act designed to give a student an unfair advantage. The term "plagiarism" includes, but is not limited to: (a) the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and (b) the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. Attempts to participate in polling when absent from class are acts of **academic dishonesty** and any student involved in this form of academic misconduct will receive **zero out of 100 points** for their course polling grade.

Acceptable Student Behavior: Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc.
The Code of Student Conduct - http://deanofstudents.unt.edu/conduct

Retention of Student Records: Student records pertaining to this course are maintained in a secure location by the instructor. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Coursework completed via the CANVAS on-line system, including grading information and comments, is also stored in a safe electronic environment. You have a right to view your individual record; however, information about your records will not be divulged to other individuals without the proper written consent. You are encouraged to review the Public Information Policy and F.E.R.P.A. (Family Educational Rights and Privacy Act) laws and

the university's policy in accordance with those mandates at the following link: https://registrar.unt.edu/faculty/ferpa-and-student-records

Tardiness: If you arrive late, please enter quietly and sit down. Do not walk in front of speakers or disrupt the class in any other way.

Cell Phones and Computers: Cell phones, pagers, other wireless communication devices (e.g., pda's, blackberry devices) **cannot be used during class**, except as a polling device or to facilitate learning as approved by the instructor. If you are discovered to be using your device for purposes other (e.g., Facebook, shopping) than working on class material, **it belongs to the instructor for the rest of the day**. I've always enjoyed calling my friends in Kenya on someone else's dime. Laptops and tablet computers may be used in class for the purpose of taking notes or to facilitate the learning of course materials only. No other use of computers is allowed in class.

Policy on the use of Generative AI models/tools: For this class, you are allowed to use generative Artificial Intelligence (AI) tools to: 1) generate ideas, 2) access explanations of material/topics discussed in class, 3) code, 4) analyze and process data, 5) create images or visualize data, and 6) organize your time or tasks. However, one of the objectives of the written "Review Paper" assignment is for you to develop effective writing skills and present your findings and proposal in a clear and effective scientific manner. Therefore, DO NOT use AI tools to compose/write your Review Paper Assignment. If use of AI is detected in any portion of a submitted Review Paper, the student submitting such an assignment will receive zero points for plagiarism/unauthorized use of AI tools.

Important Dates:

a) Last day to drop a course section to no longer appear on the official transcript and to receive a partial refund for the course section, January 24, 2026.
b) The last day to notify instructors in writing of any planned absences for religious holidays. The 12th day of class, January 27, 2026.
c) The last date students can drop a course with the grade of W, April 10, 2026.

Extra Help: PLEASE DO NOT WAIT UNTIL THE END OF THE SEMESTER – IT IS TOO LATE THEN! If you are having trouble with this class, please come by my office during office hours or make an appointment to visit with me. I am always available by email.

"Succeed at UNT" - to provide students with consistent student success messages, and user-friendly, accessible links to student support services. The following six focused messages:

- Show Up
- Find Support
- Take Control
- Be Prepared
- Get Involved
- Stay Focused

For more information, visit the following: https://success.unt.edu/asc

Tentative Schedule:

Date	Topic	Reading
Jan 13	Introduction to Course	
Jan 15	Ecosystems & Definitions	Chapter 1
Jan 20	The Scientific Method	Chapter 1
Jan 22	Climate Fundamentals	Chapter 2
Jan 27	Climate Change and Effects on Biota	Chapter 3
Jan 29	Terrestrial and Aquatic Biomes	Chapter 4
Feb 3	Genetic Variation & Evolution	Chapter 5
Feb 5	Natural Selection & Adaptation	Chapter 5
Feb 10	**Exam 1 (chapters 1-5)**	
Feb 12	Adaptations to Aquatic Environments	Chapter 6
Feb 17	Properties of H_2O and salt balance in animals	Chapter 6
Feb 19	Adaptations of Plants in Terrestrial Environments	Chapter 7
Feb 24	Adaptations of Animals in Terrestrial Environments	Chapter 7
Feb 26	Adaptations to Variable Environments	Chapter 8
Mar 3	Migration, Dormancy, & Optimal Foraging Theory	Chapter 8
Mar 5	**Exam 2 (chapters 6-8)**	
Mar 9 – 13	Hallelujah – Spring Break	
Mar 17	Life History Traits, Semelparity, & Iteroparity	Chapter 9
Mar 19	Life History Trade-offs	Chapter 9
Mar 24	Reproductive Strategies	Chapter 10
Mar 26	Mating Systems and Sexual Selection	Chapter 10
Mar 31	Social Behavior, Altruism, and Cooperative Breeding	Chapter 11
Apr 2	Characteristics of Populations & Ideal Free Distribution	Chapter 12
Apr 7	**Exam 3 (Chapters 9-12)**	
Apr 9	Population Growth, Survivorship, and Life Tables	Chapter 13
Apr 14	Population Dynamics, Extinction, & Metapopulations	Chapter 14
Apr 16	Predation, Herbivory, and Antipredation Adaptations	Chapter 15
Apr 21	Competition and Community Succession	Chapters 17 & 20
Apr 23	Global Declines in Biodiversity	Chapter 24
Apr 28	Conservation Biology	Chapter 24
Apr 30	Problem Exercises & Review	
May 7 (Thurs)	**Final Exam (Chapters 13, 14, 15, 17, 20, & 24)**	**10:00 am – 12:00 pm**