

GENERAL BIOLOGY II

Biology 1307

Summer II 2025

Instructor: Rachel Leicher

Office: **Email:** Rleicher@uttyler.edu **Phone number:**

Office hours: TBD , or by appointment

Course Objectives: Biology 1307 is the second of two courses designed to help understand the scientific study of life at the organismal, population, and community levels, including form, function, reproduction, taxonomy, systematics, ecology, and evolutionary history of biodiversity.

Student Learning Outcomes: After this class, you should be able to...

- To define biology, comprehend and apply the scientific process.
- To describe and understand the concept of evolution as genetic change in a population over time. To show how evolution is a unifying theme in biology.
- To describe the concept of phylogeny and apply it to prokaryotes, protists, plants, fungi, and animals.
- To describe and understand vertebrate anatomy and physiology.
- To describe and understand the ecology of population, communities, ecosystems, and the biosphere. Understand the role of humans in the ecology of the biosphere.
- To understand the significance of biology to you and your life and apply the knowledge acquired to making educated decisions as a member of society.
- To apply new learning and studying skills to your life

Required Textbook and Other Materials:

- Biology 2e – Open Stax (Free Textbook)

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1. [https://openstax.org/details/books/biology-2e/?Book%20detailsLinks to an external site.](https://openstax.org/details/books/biology-2e/?Book%20detailsLinks%20to%20an%20external%20site)

Grading:

	Points Possible	Grade Distribution		
		Percentage	Points	Grade
Exam 1	100			
Exam 2	100	90-100%	582 – 650	A
Exam 3	100	80-89%	511 – 581	B
Final	150	70-79%	452 – 510	C
Quizzes	70	60-69%	387 – 451	D
Attendance	15	50-59%	0 – 326	F
Participation	15			
Group Project (1)	100			
Total	650			

Grading: Letter grades will be assigned according to the following scale:

A = above 89.5 B = 79.5 – 89.49 C = 69.5 – 79.49 D = 59.5 – 69.49 F = Below 59.5

All your course grades will be in Canvas so that you can view your current course grade anytime. Please be aware that I cannot give you EXTRA CREDIT or WORK at the end of the semester. Your average shown in Canvas will determine your final grade in the course.

At the end of the semester, grades will be calculated in Canvas according to the syllabus. If your average is **within 0.5 points** of the following letter grade, I will round it up **automatically** (see grade scale above). The only other adjustment that will be made is if the final percentage is **WITHIN ONE POINT** of the following letter grade (and **NO** more), and the student has missed **THREE OR FEWER LECTURES, TWO or FEWER WEEKLY QUIZZES** and has a **CLASS PARTICIPATION GRADE OF 80% or HIGHER**. If you meet these criteria, I will **round up to the next letter grade**. (Mitigating circumstances will be considered at the discretion of the instructor).

Exam policy: There will be four exams during the semester. The first three are regular exams consisting of approximately 50 questions (2pt each), while the fourth will be a comprehensive final of roughly 100 questions (1.5pt each). All exams will be multiple-choice questions. The comprehensive exam will contain new and old content (terminology seen on all old exams). **Most questions** will be taken from **the lecture content**. All exams will be in-person and require **you to purchase bring an 882E scantron**. These can be purchased from the campus bookstore, Amazon, etc. Be warned that I typically **DO NOT curve exams, so don't bother to ask!**

Make-up Exams: If you cannot take an exam when scheduled due to unforeseen illnesses, deaths in the family, or other traumatic events, contact me within 24 hours of the event to schedule a make-up exam. Please provide **documentation** (letters from family are **NOT** acceptable) of the events that may conflict with exam dates. I will work with you to schedule a makeup exam.

If you cannot take an exam as scheduled for some non-emergency issue, you must inform me well in **ADVANCE**. Students who fail to make timely arrangements will most likely receive a grade of "0" for the exam missed.

Quizzes: There will be **14** quizzes during the semester. Every quiz will be taken individually. All quizzes will be taken during our normal class time. These will 5 questions quizzes where each question is worth 1 point. These will be displayed on a PowerPoint and you will have 1 minute per question. If you arrive late to class and miss some of the questions or the entire quiz, you will not be able to make them up. **There will be NO make-up quizzes.**

Group Projects: In this group project, students will work in teams of 2–3 to create a professional-quality field guide featuring 50 species centered around a unifying theme

(e.g., regional plants, evolutionary relationships, or habitat-specific fauna). For each species, students will include detailed identification information, labeled photos, habitat and behavior descriptions, a range map, conservation status, and an identification key. The project emphasizes teamwork, research skills, and the use of credible scientific sources, culminating in a written field guide that demonstrates mastery of biological diversity and classification concepts. This project will be worth 100 points. **More details on this assignment will be posted on CANVAS and will be discussed in class within the first week of the semester.**

CANVAS: Students should log onto **Canvas** ASAP and carefully read all announcements. Canvas and student email should be checked **DAILY** for new announcements or messages. On Canvas, you will find lecture outlines, reviews for exams, videos, discussion board posts, and much more that will be very helpful for you as you take this course. You will also have quizzes posted throughout the semester under the module sections (labeled Quizzes). Announcements will be posted when these quizzes are active for you to take. Another helpful tool is that **all course grades will be in Canvas, so students will be able to view and calculate current course grades at any time.**

Attendance/Participation: Attendance and participation are essential to success in this class. If you miss a class, it is your responsibility to contact another student (not the instructor) to get notes and other announcements made during class. Your attendance will be recorded by answering the clicker questions during each class period. For attempting to answer your questions, you will receive points for participating, and at the end of the semester will earn **participation points (15 points)**. Attendance will also be taken daily and worth 15 total points.

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. **Be forewarned that possessing anything containing course content will be considered cheating, whether you refer to it during the exam.** Also, be aware that **TALKING to anyone other than the instructor or proctor during an EXAM will automatically be considered cheating.** It does not matter what you were talking about. This includes using **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**, at the instructor's discretion.

Use of an AI Generator such as ChatGPT, iA Writer, MidJourney, DALL-E, etc. is **explicitly prohibited** unless otherwise noted by the instructor. The information derived from these tools is based on previously published materials. Therefore, using these tools

without proper citation constitutes plagiarism. Additionally, be aware that the information derived from these tools is often inaccurate or incomplete. **It is imperative that all work submitted should be your own.** Any assignment found to have been plagiarized or to have used unauthorized AI tools may receive a zero and/or be reported for academic misconduct.

UNIVERSITY POLICIES AND INFORMATION

Withdrawing from Class: Students may [Links to an external site.withdrawLinks to an external site.](#) (drop) from this course using the [Withdrawal PortalLinks to an external site.](#) Withdrawing (dropping) this course can impact your Financial Aid, Scholarships, Veteran Benefits, Exemptions, Waivers, International Student Status, housing, and degree progress. Please speak with your instructors, consider your options, speak with your advisor, and visit the One-Stop Service Center (STE 230) or email enroll@uttyler.edu to get a complete review of your student account and the possible impacts to withdrawing. We want you to make an informed decision. UT Tyler faculty and staff are here for you and often can provide additional support options or assistance. Make sure to carefully [read the implications for withdrawing from a course and the instructionsLinks to an external site.](#) on using the [Withdrawal portalLinks to an external site.](#)

Texas law prohibits students from dropping more than six courses during their entire undergraduate career*. The six courses dropped include those from other 2-year or 4-year Texas public colleges and universities. Consider the impact withdrawing from this class has on your academic progress and other areas, such as financial implications. We encourage you to consult your advisor(s) and Enrollment Services for additional guidance. CAUTION #1: Withdrawing before census day does not mean you get a full refund. Please see the [Tuition and Fee Refund ScheduleLinks to an external site.](#) CAUTION #2: All international students must check with the [Office of International ProgramsLinks to an external site.](#) before withdrawing. All international students are required to enroll full-time for fall and spring terms. CAUTION #3: All UT Tyler Athletes must check with the Athletic Academic Coordinator before withdrawing from a course. CAUTION #4: All veterans or military-affiliated students should consult with the [Military and Veterans Success CenterLinks to an external site.](#)

* Students who began college for the first time before 2007 are exempt from this law.

Artificial Intelligence Statement: UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool.

Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy. Refer to the About This Course section of the UT Tyler Syllabus Module for specific information on appropriate use of AI in your course(s).

Final Exam Policy: Final examinations are administered as scheduled. If unusual circumstances require that special arrangements be made for an individual student or class, the Dean of the appropriate college, after consultation with the faculty member involved, may authorize an exception to the schedule. Faculty members must maintain student final examination papers for a minimum of three months following the examination date.

Incomplete Grade Policy: If a student, because of extenuating circumstances, is unable to complete all of the requirements for a course by the end of the semester, then the instructor may recommend an Incomplete (I) for the course. The "I" may be assigned in place of a grade only when all of the following conditions are met: (a) the student has been making satisfactory progress in the course; (b) the student is unable to complete all coursework or final exam due to unusual circumstances that are beyond personal control and are acceptable to the instructor, and (c) the student presents these reasons before the time that the final grade roster is due. The semester credit hours for an Incomplete will not be used to calculate the grade point average.

The student and the instructor must submit an Incomplete Form detailing the work required and the time by which the work must be completed to their respective department chair or college dean for approval. The time limit established must not exceed one year. Should the student fail to meet all of the work for the course within the time limit, then the instructor may assign zeros to the unfinished work, compute the course average for the student, and assign the appropriate grade. If a grade has yet to be assigned within one year, then the Incomplete will be changed to an F, or NC. If the course was initially taken under the CR/NC grading basis, this may adversely affect the student's academic standing.

Grade Appeal Policy: Disputes regarding grades must be initiated within sixty (60) days from the date of receiving the final course grade by filing a Grade Appeal Form with the instructor who assigned the grade. A grade appeal should be used when the student thinks the final course grade awarded does not reflect the grades earned on assessments or follow the grading scale as documented in the syllabus. The student should provide the rationale for the grade appeal and attach supporting document about the grades

earned. The form should be sent via email to the faculty member who assigned the grade. The faculty member reviews the rationale and supporting documentation and completes the instruction section of the form. The instructor should return the form to the student, even if a grade change is made at this level. If the student is not satisfied with the decision, the student may appeal in writing to the Chairperson of the department from which the grade was issued. In situations where there is an allegation of capricious grading, discrimination, or unlawful actions, appeals may go beyond the Chairperson to the Dean or the Dean's designee of the college from which the grade was issued, with that decision being final. The Grade Appeal form is found in the [Registrar's Form Library](#). [Links to an external site.](#)

NOTE: The Grade Appeal Form is different from the Application for Appeal form submitted to the Student Appeals Committee, which does not rule on grade disputes as described in this policy.

Disability/Accessibility Services: In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA), the University of Texas at Tyler offers accommodations to students with learning, physical, and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or a history of modifications or accommodations in a previous educational environment, you are encouraged to visit <https://hood.accessiblelearning.com/UTTyler/Links to an external site> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with the Assistant Director Student Accessibility and Resources/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <https://www.utt Tyler.edu/disability-servicesLinks to an external site>, the SAR office located in the Robert Muntz Library, LIB 460, email saroffice@utt Tyler.edu, or call 903.566.7079."

Military Affiliated Students: UT Tyler honors the service and sacrifices of our military-affiliated students. If you are a student who is a veteran, on active duty, in the reserves or National Guard, or a military spouse or dependent, please stay in contact with your faculty member if any aspect of your present or prior service or family situation makes it difficult for you to fulfill the requirements of a course or creates disruption in your academic progress. It is important to make your faculty member aware of any complications as far in advance as possible. Your faculty member is willing to work with you and, if needed, put you in contact with university staff who are trained to assist you. The [Military and Veterans Success Center \(MVSC\)](#) [Links to an external site.](#) has campus resources for military-affiliated students. The MVSC can be reached at MVSC@utt Tyler.edu or via phone at 903.565.5972.

Students on an F-1 Visa: To remain in compliance with Federal Regulations requirements you must do the following:

- Traditional face-to-face classes: Attend classes on the regular meeting days/times.

- Hybrid Classes: Attend all face-to-face classes convened by the instructor according to the schedule set for your specific course.
- Online course: Only one online course can count toward your full-time enrollment. Students are expected to be fully engaged and meet all requirements for the online course.

Academic Honesty and Academic Misconduct: The UT Tyler community comes together to pledge that "Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do." Therefore, we enforce the [Student Conduct and Discipline policyLinks to an external site.](#) in the Student Manual Of Operating Procedures (Section 8).

FERPA: UT Tyler follows the Family Educational Rights and Privacy Act (FERPA) as noted in [University Policy 5.2.3Links to an external site.](#). The course instructor will follow all requirements to protect your confidential information.

Absence for Official University Events or Activities: This course follows the practices related to [Excused Absences for University Events or ActivitiesLinks to an external site.](#) as noted in the Catalog.

Absence for Religious Holidays: This course follows the practices related to [Excused Absences for Religious Holy Days as noted in the CatalogLinks to an external site.](#).

Absence for Pregnant Students: This course follows the requirements of Texas Laws SB 412, SB 459, SB 597/HB 1361 to meet the needs of pregnant and parenting students. Part of the supports afforded pregnant students includes excused absences. Faculty who are informed by a student of needing this support should make a referral to the Parenting Student Liaison. NOTE: Students must work with the Parenting Student Liaison in order to receive these supports. Students should reach out to the Parenting Student Liaison at parents@uttyler.edu and also complete the [Pregnant and Parenting Self-Reporting FormLinks to an external site.](#).

Campus Carry: We respect the right and privacy of students 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. More information is available at [## **Student Resources:**](http://www.uttyler.edu/about/campus-carry/index.php.Links to an external site.</p>
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Resources to assist you in this course

- [UT Tyler Student Accessibility and Resource \(SAR\) Office Links to an external site.](#)(provides needed accommodations to students with document needs related to access and learning)
- [UT Tyler Writing Center Links to an external site.](#)
- [The Mathematics Learning Center Links to an external site.](#)
- [UT Tyler PASS Tutoring Center Links to an external site.](#)
- [UT Tyler Supplemental Instruction Links to an external site.](#)

- [Upswing \(24/7 online tutoring\)](#) - covers nearly all undergraduate course areas [Links to an external site.](#)[Links to an external site.](#)[Links to an external site.](#)
- [Robert Muntz Library](#) [Links to an external site.](#) and [Library Liaison](#) [Links to an external site.](#)
- [Canvas 101](#) [Links to an external site.](#)(learn to use Canvas, proctoring, Unicheck, and other software)
- LIB 422 -- Computer Lab where students can take a proctored exam
- [The Career Success Center](#) [Links to an external site.](#)
- [UT Tyler Testing Center](#) [Links to an external site.](#)
- [Office of Research & Scholarship Design and Data Analysis Lab](#) [Links to an external site.](#)

Resources available to UT Tyler Students

- [UT Tyler Counseling Center](#) [Links to an external site.](#)(available to all students)
- [My SSP App](#) [Links to an external site.](#)(24/7 access to Student Support Program counseling through phone or chat and online wellness resources available in a variety of languages)
- [Student Assistance and Advocacy Center](#) [Links to an external site.](#)
- [Military and Veterans Success Center](#) [Links to an external site.](#)(supports for all of our military-affiliated students)
- [UT Tyler Patriot Food Pantry](#) [Links to an external site.](#)
- [UT Tyler Financial Aid and Scholarships](#) [Links to an external site.](#)
- [UT Tyler Registrar's Office](#) [Links to an external site.](#)
- [Office of International Programs](#) [Links to an external site.](#)
- [Title IX Reporting](#) [Links to an external site.](#)
- [Patriots Engage](#) [Links to an external site.](#)(available to all students. Get engaged at UT Tyler.)

I RESERVE THE RIGHT TO MODIFY THIS SYLLABUS AT ANY TIME. THEREFORE, YOUR ATTENDANCE AND ATTENTION TO THE ANNOUNCEMENTS IN CANVAS ARE CRUCIAL BECAUSE THEY WILL ASSIST YOU IN REMAINING CURRENT ON THE MATERIAL AND KNOWING WHEN THE SYLLABUS MAY BE MODIFIED.

<p>Schedule of Topics - BIOL 1307</p>

Topic	Chapter
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Evolution and the Origin of Species	18
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The Evolution of Populations	19
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Phylogenies and the History of Life	20
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Exam I - ** July 15th

Prokaryotes: Bacteria and Archaea	22
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Protists	23
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Fungi and Seedless Plants	24, 25
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Seed Plants	26
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Exam II - ** July 23rd

Introduction to Animal Diversity	27
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Invertebrates	28
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Vertebrates	29
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Animal Body: Basic Form and Function	33 (+ excerpts 34 – 43)
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Exam III - ** July 31st

Ecology and the Biosphere	44
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Population and Community Ecology	45
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Ecosystems	46
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<p>Final Exam (Comprehensive) – August 7th</p>

**** Tentative Exam Dates – subject to change**

Last Day to Drop with a “W”: _____July 29th, 2025_____