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## GENERAL BIOLOGY I

Biology 1306 (001)

Summer I 2025

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**Instructor:** Rachel Leicher, MS.

**Office:** BEP 118

**Email:** rleicher@uttyler.edu

**Phone number:**

**Office hours:** by appointment

**Meeting Information:** 8:00-10:50AM on Mondays, Tuesdays, Wednesdays, and Thursdays in RBN (Ratliff Building North) 3038

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**Course Objectives:** Biology 1306 is the first of two courses designed to provide a thorough introduction to biological science. The goal of the course is that students learn important facts about the natural world and understand the significance of these facts within the context of major biological concepts.

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

- Define biology and evolution
- Comprehend and apply the scientific process
- Describe a cell, its parts, how it uses energy (respiration and photosynthesis), its' processes of replication (mitosis and meiosis), and the relevance of those things to patterns of inheritance (genetics)
- Understand the significance of biology to you and your life
- Apply the knowledge you have acquired to make educated decisions as a member of society

**Required Textbook and Other Materials:**

1. Biology 2e – Open Stax (Free Textbook)
  - a. <https://openstax.org/details/books/biology-2e/?Book%20details>
2. Echo360 (Formerly Turning Technology) NXT or QT2 Student Response device (plus Echo360 account and license): available in the bookstore or on the Turning Technologies website.  
<https://account.turningtechnologies.com/account/>

**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 (cumulative)	150	70-79%	452 – 510	C
Quizzes	70	60-69%	387 – 451	D
Attendance points	15	50-59%	0 – 326	F
Participation	15			
Group Project (2)	100			
<b>Total</b>	<b>650</b>			

**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 you will be able to view your current course grade at any time. 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 next 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 next 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, then 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 exam will be a comprehensive final that will consist of approximately 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 taken in person and will **require you to purchase and bring your own scantrons (882-E). They must be 882-E scantrons** Be warned that I typically **DO NOT curve exams, so don't bother to ask!** Your **Final exam will be cumulative**. This includes all the info covered up to the final exam.

**Make-up Exams:** If you are unable to 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 are unable to take an exam as scheduled for some sort of non-emergency issue, then you must let me know 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. Each quiz will be taken in class individually. Each quiz will be taken at the beginning of class every day, except for the first day of class and any exam days. For each quiz you will have 10-15 minutes to complete the 5-question quiz. If you arrive late to class for any reason, you will only be allowed the amount of time left to answer the questions. Each quiz will be worth 5 points. **There will be NO make-up quizzes.**

**Group Projects:** You will be assigned to a group of five this semester to complete two projects. These assignments will be worth **a total of 100 possible points** (50 per project). For the first assignment, you will have to create an **infographic** on a particular topic (list to be provided) and submit it for a group grade. Your final score on the group project will also include a team assessment that you must complete on your team members. For the second project, you will need to create a different creative expression using a different medium than an infographic to convey the importance of the same previously chosen topic. This could include, but is not limited to: a song, a video, a music video, a children's book, etc. It is important to remember that you will have to turn in this project somehow, so if you were to write a song, for example, you would need to record it and send me the file. Also remember, this is a group project. This should be something everyone in your group can contribute to. If any one person, or couple of people, would like to separate into new groups for the second project, that will be allowed. Make sure to inform the instructor of this change. Grades on these group projects may vary depending on how active you are in the planning, creating, and submission of the final projects. **More detail 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 your in class participation, kahoot quizzes, in class discussion, or other in class activities. These points are reflected as "Attendance Points" in the grading rubric.

**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 possession of anything containing course content will be considered cheating, whether you actually refer to it during the exam.** Also, be aware that **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**, at the discretion of the instructor.

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 that is 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 [withdraw](#) (drop) from this course using the [Withdrawal Portal](#). 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](mailto: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 instructions](#) on using the [Withdrawal portal](#).

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 Schedule](#). CAUTION #2: All international students must check with the [Office of International Programs](#) 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 Center](#).

\* 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](#).

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/> 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.uttyler.edu/disability-services>, the SAR office located in the Robert Muntz Library, LIB 460, email [saroffice@uttyler.edu](mailto:saroffice@uttyler.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 \(MVSC\)](#) has campus resources for military-affiliated students. The MVSC can be reached at [MVSC@uttyler.edu](mailto:MVSC@uttyler.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 policy](#) 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 5.2.3](#). 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 Activities](#) 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 Catalog](#).

**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](mailto:parents@uttyler.edu) and also complete the [Pregnant and Parenting Self-Reporting Form](#).

**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 <http://www.uttyler.edu/about/campus-carry/index.php>.

## Student Resources:

### Resources to assist you in this course

- [UT Tyler Student Accessibility and Resource \(SAR\) Office](#) (provides needed accommodations to students with document needs related to access and learning)
- [UT Tyler Writing Center](#)
- [The Mathematics Learning Center](#)
- [UT Tyler PASS Tutoring Center](#)
- [UT Tyler Supplemental Instruction](#)
- [Upswing \(24/7 online tutoring\)](#) - covers nearly all undergraduate course areas [Links to an external site.](#)
- [Robert Muntz Library](#) . and [Library Liaison](#)
- [Canvas 101](#) (learn to use Canvas, proctoring, Unicheck, and other software)
- LIB 422 -- Computer Lab where students can take a proctored exam
- [The Career Success Center](#)

- [UT Tyler Testing Center](#)
- [Office of Research & Scholarship Design and Data Analysis Lab](#)

#### Resources available to UT Tyler Students

- [UT Tyler Counseling Center](#) (available to all students)
- [My SSP App](#) (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](#)
- [Military and Veterans Success Center](#) (supports for all of our military-affiliated students)
- [UT Tyler Patriot Food Pantry](#)
- [UT Tyler Financial Aid and Scholarships](#)
- [UT Tyler Registrar's Office](#)
- [Office of International Programs](#)
- [Title IX Reporting](#)
- [Patriots Engage](#) (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 ON CANVAS ARE CRUCIAL BECAUSE THEY WILL ASSIST YOU WITH REMAINING CURRENT ON THE MATERIAL AND KNOWING WHEN THE SYLLABUS MAY BE MODIFIED.**

Schedule of Topics - BIOL 1306	
Topic	Chapter
Introduction, Study of Life	1
Chemical Context of Life	2
Carbon and Molecular Diversity of Life	3
Tour of the Cell	4
<b>EXAM I – ** June 10<sup>th</sup></b>	
Membrane Transport and Cell Signaling	5, 9

Introduction to Metabolism	6
Cellular Respiration and Fermentation	7
Photosynthesis	8
<b>EXAM II – ** June 18<sup>th</sup></b>	
The Cell Cycle	10
Meiosis and Sexual Life Cycles	11
Mendel and the Gene Idea	12
<b>EXAM III – ** June 26<sup>th</sup></b>	
Chromosomal Basis of Inheritance	13
Molecular Basis of Inheritance	14
Gene expression (Gene to Protein)	15,16

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

**June 19, 2025 – NO Labs – Juneteenth Holiday**

**Last Day to Drop with a “W”: June 24, 2025**

**Final Exam (cumulative): July 3, 2025**