BIO 311C **Introductory Biology I** **Spring 2022**

Unique Numbers: 47530, 47535, 47540, 47545, 47550, 47555, 47620, 47625, 47630, 47635, 47640, 47645

Meeting Time & Place: MWF 10:00 am PAI 3.02 & MWF 12:00 pm BUR 212 & Zoom

Instruction Modality: Hybrid

Instructor: Dr. E. Jane Bradbury, Ph.D.

E-mail: e.jane.bradbury@utexas.edu

Office Hours via Zoom: W 11 am & F 1:30 pm

*additional times by appointment

TA information: Please see the Course Resources section of Canvas

---

Course Description:

Introduction to Biology I is the primary foundational course in biology at UT, Austin. As such, it will provide a comprehensive introduction to the key themes of biology, including biological macromolecules, cell structure and function, energy transformation via cellular respiration and photosynthesis, molecular genetics, and cellular division. This course is intended for science majors and pre-health profession students. However, any student meeting the prerequisite may attend (credit or concurrent registration in Chemistry 301). **If you are not a science or pre-health major, I encourage you to investigate BIO 302G as an option to fulfill your science requirement.** Additionally, though this course is a Biology course, I encourage all students to also view it as a ***language*** course—there are more new vocabulary words in the average introductory biology course than in an introductory foreign language course!

Core Objectives:

This course may be used to fulfill three hours of the natural science and technology (Part I or Part II) component of the university core curriculum and addresses the following four core objectives established by the Texas Higher Education Coordinating Board: communication skills, critical thinking skills, teamwork, and empirical and quantitative skills.

By the end of this course, students should be able to:

1) Provide at least three detailed examples that demonstrate how biological systems evolve structure that relates to function.

2) Diagram how energy is stored, used, and transformed in living systems;

3) Describe how genetic information is transmitted through DNA replication and cell division and expressed in a regulated manner.

Required Materials and Technologies:

- *Biology & the Molecular Foundations of Life*, E. Jane Bradbury, $45 via TopHat
- Student subscription to the in-class online interactive learning platform TopHat
- Either a computer or smart phone with capacity to access Canvas and TopHat
- Zoom and associated necessary hardware, including video camera and microphone

Online Class Format:

This class is a "hybrid" on-line and in-person class. This teaching modality has several advantages, including increased course accessibility for students, increased active learning time in lectures, increased accommodation for students with different learning needs and styles, and the flexibility to change how course instruction is delivered depending on the status of the on-going pandemic. We strive to conduct as much of the class in-person as possible, however, safety is our highest priority. Thus, we will likely have both in-person and synchronous on-line course components throughout the semester. Check Canvas for weekly updates on instruction implementation.

Even when lectures and discussions are conducted in-person in the lecture hall, they will also be filmed and recorded via Zoom, **however synchronous attendance is still mandatory even via Zoom as lectures will include substantial time working in teams on graded assignments.** Lectures are intended to clarify and solidify course material and to scaffold analysis and application of concepts so that you can take your understanding to the next level. As such, **asynchronous assignments form a critical knowledge foundation for the course and it is extremely important that you complete them before and after coming to class.** Discussion sections are intended to both build critical learning and thinking skills as well as take the most critical course concepts to an advanced level. Similar to lectures, even when discussions are delivered via Zoom, **synchronous attendance is mandatory**.

This being said, the teaching team understands that we are living through a prolonged global crisis with no sign of immediate abatement. *Your mental, physical, and spiritual health is the utmost priority.* If you must miss a lecture, discussion, or asynchronous homework assignment, you may come to **any** office hours to make it up. Quizzams, however, will require documentation of illness or other personal crisis to be excused and given a make-up opportunity.

Course Points Allocation:

Assessment	Points
Homework Assignments	200
Lecture Engagement	100
Weekly Discussions	100
6 "Quizzams" @ 25 points each	150
Cumulative Final Exam	100
Total Points	650

Official University of Texas at Austin Grading Scale:

Percentage	Letter Grade
93.5% and above	A
90% - 93.49%	A-
86.5% - 89.99%	B+
83.5% - 86.49%	B
80% - 83.49%	B-
76.5% - 79.99%	C+
73.5% - 76.49%	C
70% - 73.49%	C-
66.5% - 69.99%	D+
63.5% - 66.49%	D
60% - 63.49%	D-
59.99% and below	F

Re-Grade Policy:

There are no re-grade opportunities outside of keying or rubric errors. If there is a keying or rubric error applied to your assignment, you should email Dr. Bradbury and include relevant screen shots or attend an online office hours session.

Teaching & Learning Philosophy:

An important part of succeeding in this course is understanding the underlying philosophy behind my teaching strategies. Education should be valued for its ability to grow and strengthen the mind. I expect you to be engaging in this course because you desire to improve yourself and your cognitive abilities. This attitude carries with it an implicit sense of self-responsibility for one's own learning. I am not here to *teach you* as much as I am here to *help you learn*. I always do my best to craft my courses to provide a diverse set of learning opportunities. One tool available to you will be the traditional lecture. However, just as much of the course content will be communicated with readings and other exercises. Similarly, there is an entire body of literature that would be impossible to formally include in the course but which I encourage you to explore in your quest for understanding specific facets of course content. I cannot tell you "everything you need to know"—that's not how true learning works. However, I am committed to providing you with the best possible learning environment to expand your understanding of the science and systems of life!

Attendance & Participation in an Online Environment:
I expect that all of my students are autonomous adults acting with agency in their own lives. You are taking this course because you want to learn. Because student engagement in online courses is the biggest hurdle to student learning, the grade structure of the course is very heavily weighted towards the weekly activities and discussion boards. **If there are any students who will be missing extended access to the course due to a University-sponsored event or religious observance, please notify Dr. Bradbury ASAP.**

Skills Needed for Success in an Online Environment:

Succeeding in an online environment requires very different skills than are required for success in a traditional in-person large lecture college course. Your ability to memorize facts or perform under pressure is not heavily tested. However, your ability to **independently self-motivate**, **keep a schedule**, and **direct your own learning** will make the difference between success and failure. The course is structured with incremental deadlines to help you not fall behind and many different opportunities for synchronous engagement with the teaching team. However, only *you* will be responsible for managing your time and asking for help!

University Policies:

Religious holy days: A student who misses classes or other required activities, including examinations, for the observance of a religious holy day should inform the instructor at least one week before the absence and be prepared to complete the assignment before the absence.

Students with Disabilities: Please notify your instructor of any modification/adaptation you may require to accommodate a disability-related need. You may find out more information on the Services for Students with Disabilities website: http://diversity.utexas.edu/disability/ and/or http://diversity.utexas.edu/disability/how-to-register-with-ssd/

Policy on Scholastic Dishonesty: Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Policies on scholastic dishonesty will be strictly enforced. For further information, please visit the Office of Student Conduct and Academic Integrity website at http://deanofstudents.utexas.edu/conduct/.

Use of E-mail for Official Correspondence to Students: All students should be familiar with the University's official e-mail student notification policy. It is the student's responsibility to keep the University informed as to changes in his or her e-mail address. Students are expected to check e-mail on a frequent and regular basis in order to stay current with University-related communications, recognizing that certain communications may be time-critical. The complete text of this policy and instructions for updating your e-mail address are available at http://www.utexas.edu/its/policies/emailnotify.html .

University of Texas Honor Code: "As A Student Of The University Of Texas At Austin, I Shall Abide By The Core Values Of The University And Uphold Academic Integrity."