University of North Texas
Department of Biological Sciences
Course Syllabus
Cell Biology - BIOL 3510-501 Spring 2026
3 Credit Hours
Meeting Times: MW: 11:00 AM–12:30 PM
FRLD 360

Instructor: Dr. Regina Oyesanya
regina.oyesanya@unt.edu
Office: FRIP 224/LIFE A324

Office Hours (Reserve on Canvas Calendar)
Mon: 9–10 am (Frisco)
Thurs: 12:30–1:30 pm (Denton)
Or by appointment

****I am also available immediately after class for quick questions and chat. I am willing to discuss things over email, or by phone.****

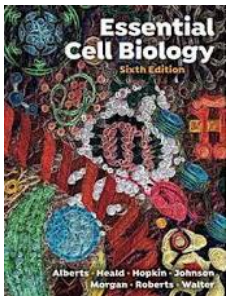
COURSE WEBSITES

Primary: http://canvas.unt.edu Others: http://pollEv.com

COURSE PREREQUISITE

Introductory Biology I and II, any biology lecture/lab at the 2000 level, and Organic Chem I, all completed with a grade of C or better.

REQUIRED COURSE TEXTBOOK



Albert's Essentials of Cell Biology, 6th edition, published by Norton. This book is available for purchase or rental at the UNT bookstore and can also be bought or rented from various local and on-line retailers. Readings follows the topic order in the course schedule. You will be well-prepared for the lecture if you complete the assigned readings before coming to class. Problems may be assigned through Norton homework platform and Canvas, and **you must complete them** to succeed in this class. **Please consider reviewing Chapter 2 if it has been a while since your last chemistry class**.

TECHNOLOGY REQUIREMENTS

This course has digital components. To fully participate in this class, you will need internet access to reference content on the Canvas learning management system and other textbook related resources. If circumstances change, you will be informed of other technical needs to access course content. Information on how to be successful in a digital learning environment can be found at Learn Anywhere (https://online.unt.edu/learn).

COURSE DESCRIPTION

Cells are the smallest unit of life and are capable of performing and coordinating a seemingly endless variety of cellular tasks and functions. In this course, we will review the synthesis and function of macromolecules such as DNA, RNA, and proteins. We will study how cells create and use energy. We will investigate how cells communicate and transport substances both within and across their borders. We will learn about mitosis and the cell cycle and how these processes are controlled. Finally, we will explore tissues and cancer. We will use examples from various disciplines to learn about cell biology in a real-life context of medicine, research, and biotechnology. After completing this course, students will have a deeper understanding of the parts of the cell and how they function. They will be familiar with many methodologies used to study cell biology. Students will be able to apply and synthesize concepts learned throughout the semester.

STUDENT LEARNING OUTCOMES

Biological Sciences faculty at UNT have designed this course to prepare you for success armed with the fundamental knowledge of human science, and to help you understand physiological processes in relation to metabolism. After completing this course, students who take full advantage of their instructor's guidance will have the knowledge, skill, and ability to:

1. Describe the structure and function of cells and all of their major components

2. Visualize and manipulate the structure and function of the major macromolecules responsible for the function and survival of cells
3. Illustrate the processes of DNA replication, transcription and translation in cells
4. Describe how various molecules are transported in and out of cells
5. Explain how cells acquire and use energy
6. Describe how external and internal signals lead to changes within cells
7. Discuss how changes in normal cell biology can lead to cancer.

ATTENDANCE POLICY

Attendance is mandatory for this course. Life happens! If problems arise with your attendance, please discuss the situation with me before you accumulate three absences. I have great respect for students who are balancing the demands of their coursework with the responsibilities of caring for family members. If you run into challenges that require you to miss a class, please contact me. There may be some flexibility we can offer to support your academic success. You will be notified by Eagle Alert if there is a campus closing that will impact a class. The course schedule of class meetings is subject to change; please see the Campus Closures Policy (https://policy.unt.edu/policy/15-006).

BEFORE EACH CLASS

You will be well ahead to engage in and enjoy class discussions if you:

I. Access your Canvas daily for activities, updates, announcements and deadlines.
II. Visit Norton through Canvas to complete your pre- and post- assignments.
III. Have at least 3 questions to ask me from assigned readings and activities ready for next class.
IV. Be prepared to participate in class group activities.
V. Contact me at the earliest opportunity if you are having problems with the course work.

WHAT YOU SHOULD TO BRING TO EVERY CLASS MEETING

Being punctual indicates our respect for others. Please arrive before class begins to find a seat, prepare your materials, and connect with your peers. Make sure that you have:

A. Your copy of the textbook
B. Your questions from studying of the concept in focus
C. Outlines and course objectives from Canvas
D. Extra plain papers for drawings, notes, activities
E. 3 × 5 index cards (with or without lines)
F. Sticky notes (any color)
G. Bring your syllabus, notebook, calculator, a stapler, highlighter, pens and sharpened #2 pencils to class each day.
H. PollEverywhere devices (cell phones for polling or laptops for web access)
I. You! COME TO CLASS! Yes, with all civility, bring yourself, always arriving in class on time as a courtesy to others and in order not to disrupt the class.

CELL PHONES, PDAs, BEEPERS, AND OTHER ELECTRONIC DEVICES

While electronic devices are not completely prohibited, their use in class will be reserved and limited to in-class activities including polling or surveys. In respect of others, be sure to put your cell phones and beepers to "silent" mode. No Facebook checking or texting is permitted in class. All activities on PDAs must be class-related. I reserve the right to change this policy without further notice if any infringement or hindrance to other students' capacity to learn is observed. **However, no cell phones or PDAs are to be visible during any graded activity including tests and exams. Failure to observe this policy will result in a grade of zero (0) on that activity.**

EMAIL POLICY

Students must use a UNT email address to communicate with the instructor. Emails originating from Yahoo!, Hotmail, Gmail, etc., will not be read.

COURSE EXPECTATIONS

This is a lecture course that requires on-campus attendance at regularly-scheduled face-to-face class meetings. Required coursework includes online learning activities accessed through Canvas, UNT's learning management system. Students require internet access on a laptop or desktop computer (not a mobile device). As with most college courses, it is

expected that for every hour we spend in lecture, students will spend 2–3 hours outside of class preparing, studying, and completing assignments. Quizzes are after every chapter is taught. Exams are as indicated on the course schedule.

Team-Based Learning and What to Expect During Class Meetings

Tons of scientific data supports the fact students learn better in groups and teams. The success of a group or team is, however, strongly dependent on individual contributions amongst other factors. I will be your instructor and a facilitator of your learning; but whether or not you learn will be a result of what you put into your own learning process. The teaching strategy may involve dividing the entire class into teams. Teams may be given assigned readings expected to be completed in/out of class. Team-based learning session will occur at least two times during the course. This may involve:

- A short in-class individual assessment, designed to test your preparedness for the team-based learning session.
- Team-based assessment based on assigned activity or reading.
- A group learning problem will then be given to each team followed by a class discussion of the problem.

Expectations

- All work must be completed individually unless noted by the instructor.
- Any indication of plagiarism or cheating will result in a grade of zero and your assignment will be turned into the Office of Academic Integrity.
- Professionalism and confidentiality of proprietary information: We expect students to remain professional, respectful and courteous in all communication with other students and the instructor, including emails and discussion board postings. Please do not communicate any proprietary and/or confidential information from your present or previous employers and/or organizations. You may discuss any information that is in the public domain (e.g., websites, articles). Please consult your instructor if you have any questions.

Course FAQs

ABOUT …	YOUR RESPONSIBILITY	INSTRUCTOR'S	COMMENTS
Enrollment	Check that you are enrolled	Official roster will be used	Only names on official roster will receive a grade for semester
Attendance	Come to class and participate	Communicate in advance.	See "Professionalism" under Grades and Grading
Professionalism	Respect instructor; respect classmates	Expected, monitored and graded	Attendance, active participation in class, and adherence to class rules
Attitudes & Behavior	Civility; no sleeping, talking, texting or distracting other students	Respect	Dressing appropriate to learning in academic environment required; remove sunglasses, caps and wave caps
Use of Cell Phones	Leave the classroom if you have an emergency	Texting not allowed.	Except for instruction only during polling
Absences/Late Class Arrival	Notify instructor **PRIOR** to absence	Point deduction; considered absent after day's quiz	Legitimacy at instructor's discretion; requires proper written documentation
Official Excuse	Turn in within 2 days of return to campus		Legitimacy at instructor's discretion-requires proper written documentation
Assignments Make-ups		Not available	
Quizzes Make-ups		Not available	
In-class Activities Make-ups		Not available	
Final Exam Make-Up		Not Available	
Other Exam Make-ups	**Do not** make travel arrangements that will cause you to be **absent** from exams.	See "Make-Up" below	At instructor's discretion.
Graded Assignments	Obtain work from instructor	Available after class or during office hours	Discarded after one week
Dropping of Lowest Test Grades		Not available	
Extra Credit	Requires extraordinary efforts above and beyond regular course work	Not available to individuals	If offered, it will be for the entire class

Study Guides	Build your study guide	Not available	See "Study Guides" info below
Incomplete or "I" Grade	Passing at least 75% of coursework	According to the University policy. See https://registrar.unt.edu/grades/incompletes.html	At instructor's discretion
Pets or Children		Not allowed	

MAKE-UP POINT DEDUCTION SYSTEM

No make-up for final exams. For all other tests (Exam I-IV), you are allowed to makeup **BEFORE** the exam day with an official excuse. The following deduction system will apply to other tests (Exam I-III) when excuses are presented **AFTER** exam has been given to the class.

Day	1 (Test Day)	2	3	4	5	6	7
Deduction	20%	5%	5%	5%	5%	5%	5%

STUDY GUIDES

Research has shown that students who attend class are more likely to be successful. Students are strongly encouraged to prepare individual study guides by themselves as instruction is being provided in class. This has been scientifically proven to enhance learning. Students should use course objectives to build effective study guides for exams.

GRADES AND GRADING

Conventional points and category weights are shown below. All assessments will cover material presented in lecture and the textbook.

Professionalism: Worth 50 points and includes timeliness on work and class attendance. Starting with the course contract, 2 points are earned for each class meeting attended, and 2 points may be deducted for each work submitted late (quizzes/homework). No points will be awarded for excused/unexcused absences.

Class activities/homework assignments: Worth 100 possible total points; any extra homework offered after reaching 100 points will be extra credit.

Quizzes: Worth 150 maximum points; any extra quiz completed after reaching 150 points will be extra credit.

Exams: Three exams, worth 150 points each; will be in class. If a fourth exam is offered, lowest score will be dropped.

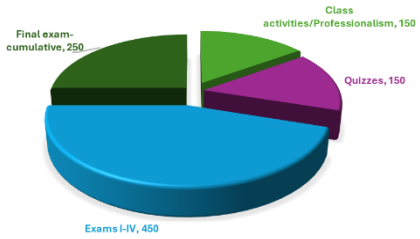
Final cumulative exams: Worth 250 points; will be in class.

Extra credits: If given, this will be for the entire class and will not exceed 30 total points.

NO extra credits will be assigned to to individual students, and grades will not be curved due to several opportunities available to build your grade.

A	900–1000
B	800–899.99
C	700–799.99
D	600–699.99
F	<599.99

Class activities/Professionalism	150 pts
Quizzes	150 pts
Exams I-III	450 pts
Final exam-cumulative	250 pts
Total	**1000 pts**



EXAM FORMAT

Exams: Exams in this course are designed based on the course objectives to assess your accumulation of concepts the necessary to your success in the next phase of your career. Exams may be essay, short answer, and/or multiple-choice type questions. These are not cumulative and will cover only the materials specified on the course schedule. Everyone is expected to be present for these exams at the time they are given. All make-up exams are at the instructor's discretion as described above.

The Final Exam: **THE FINAL EXAM WILL BE CUMMULATIVE** and will be scheduled as dictated by the University. **THERE WILL BE NO MAKEUP OF THE FINAL EXAM. THERE ARE NO BATHROOM BREAKS DURING EXAMINATIONS.**

TUTORING

Consider using the several tutorial programs available on campus free of charge to students in need. You will be required to sign up for individual tutoring if you perform poorly on any quiz or exam. If you are having problems attending the class and completing assignments, you will be referred to your advisor, and the instructor will follow up on the measures decided for improvements. See https://learningcenter.unt.edu/tutoring

STUDY HINTS FOR SUCCESS

1. Read your textbook assigned reading *before* class. Be an active reader. Read first for pleasure. Then read again for detail, with pen, paper, highlighters. (45 mins)
2. Attend class, pay attention, ask questions, and participate.
3. Take notes, not just in your mind. The pen is the master of the brain (a Chinese proverb). Write your notes down both in class and during self-study! (15 mins)
4. Review your notes in multiple ways. Concepts sticks better with repetitive review (30 mins).
    a. Read it in the book
    b. Hear it in class
    c. Review your notes.
    d. Review PowerPoints slides.
    e. Make your own flashcards.
    f. Discuss new topics with friends and family. You will be surprised what Grandma knows!
    g. Rewrite outlines.
    h. Teach it to a friend.
    i. Explain it to the wall or bathroom mirror!
    j. Design quizzes for yourself or a friend to do later.
5. Review your notes *after* each class (over lunch or snack break or on the bus) - a habit that is critical to success. (10-15mins)
6. Find a study pal or group. Change, if your study buddy is not consistent! Compare and contrasts what you learn. Think about your thoughts on new concepts. Integrate, attach and connect new information to your knowledge base. Cross-check with textbook and instructor.
7. Discuss materials and concerns with instructor ASAP.
8. Uphold UNT Honor Code. Report violations you observe.
9. Use tutoring services as available.
10. Get plenty of sleep before exams.
11. How to prepare for exams once you have been faithful to hints 1–10 above
    a. Test your knowledge in the style of the exams with old exams samples
    b. Re-do quizzes and assignments and optional assignments
    c. Explain your choices before making a final decision
    d. Get a lot of rest!
12. We are in this together. Come talk with me!

WITHDRAWAL POLICY

See the current UNT calendar for the last day to withdraw. Dropping a class means that you remove yourself from the class up to the census date. Dropped classes do not appear on your official transcript. You may now drop online up to the census date. The last date to drop this class is January 24, 2026. Withdrawal from a class means that you remove yourself from the class after the census date. Withdrawn classes appear as a *W* on your official transcript but are not calculated in your grade point average. Withdrawals are not permitted online. Please read the Spring 2026 Registration guide or contact the admissions office for information on how to withdraw. The last date to withdraw from this class is April 10, 2026. See https://registrar.unt.edu/registration/spring-academic-calendar.html

UNT CODE OF STUDENT CONDUCT

Every student in my class can improve by doing their own work and trying their hardest with access to appropriate resources. Students caught cheating on any exam/quiz will receive a "0" for that particular exam and will not be able to drop that grade. 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; c. the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university; d. any other act designed to give a student an unfair advantage. Students who use other people's work without citations will be violating UNT's Code of Student Conduct (https://policy.unt.edu/policy/06-003). For more information on UNT Code of Student Conduct, please visit https://policy.unt.edu/policy/07-012.

STUDENTS WITH DISABILITIES

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their

eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website (https://studentaffairs.unt.edu/office-disability-access). You may also contact ODA by phone at (940) 565-4323.

TENTATIVE COURSE SCHEDULE

Module	Week	Date	Lecture	Chapter	Assessment
1	1	Jan. 12	01 Introduction to the Cell	1	Read/Review Chap 2
		Jan. 14	02 Proteins I	4	**eBook Chap 1**
	2	Jan. 19	*No Classes: Martin Luther King's Day*		
		Jan. 21	03 Proteins II	4	**eBook Chap 4/Quiz 1**
	3	Jan. 26	04 DNA and Chromosomes	5	**eBook Chap 5**
		Jan. 28	05 DNA to Protein I	7	
	4	Feb. 2	06 DNA to Protein II	7	**eBook Chap 7/Quiz 2**
		Feb. 4	**Exam 1 (Lect. 01–06)**		**Chaps. 1,4,5,7**
2	5	Feb. 9	07 Membrane Structure	11	
		Feb. 11	08 Membrane Transport I	12	**eBook Chap 11**
	6	Feb. 16	09 Membrane Transport II	12	**eBook Chap 12/Quiz 3**
		Feb. 18	10 Cell Energy I	13	
	7	Feb. 23	11 Cell Energy II	13	**eBook Chap 13**
		Feb. 25	12 Mitochondria	14	
	8	Mar. 2	13 Chloroplasts	14	**eBook Chap 14/Quiz 4**
		Mar. 4	**Exam 2 (Lect. 07–13)**		**Chaps. 11–14**
	9	Mar. 9	*No Classes: Spring Break*		
		Mar. 11	*No Classes: Spring Break*		
3	10	Mar. 16	14 Intracellular Transport I	15	
		Mar. 18	15 Intracellular Transport II	15	**eBook Chap 15**
	11	Mar. 23	16 Cell Signaling I	16	
		Mar. 25	17 Cell Signaling II	16	**eBook Chap 16/Quiz 5**
	12	Mar. 30	18 Cell Signaling III	16	
		Apr. 1	19 Cytoskeleton I	17	
	13	Apr. 6	20 Cytoskeleton II	17	**eBook Chap 17/Quiz 6**
		Apr. 8	**Exam 3 (Lect. 14–19)**		**Chaps. 15–17**
4	14	Apr. 13	21 Cell Cycle I	18	
		Apr. 15	22 Cell Cycle II	18	**eBook Chap 18/Quiz 7**
	15	Apr. 20	23 Tissues, Stem cells, & Cancer I	20	
		Apr. 22	24 Tissues, Stem cells, & Cancer II	20	
		Apr. 27	25 Tissues, Stem cells, & Cancer III	20	**eBook Chap 20/Quiz 8**
	16	Apr. 29	**Final Exam Review**		**Classwork – Final**
		May 6	**Cum. Final Exam – 8:00–10:00 AM**	8 AM!!	**ALL CHAPTERS**

NOTE: The professor has the right to revise the contents of the syllabus. Notification of any changes will be made in class, by e-mail, and on Canvas.

Your viewing of this syllabus constitutes your signature testifying to your understanding and acceptance of the course policies set herein.