# Biology for Science Majors I – BIOL 1710.001 – Spring 2025 – Cury 103 – Tue/Thur 3:30 - 4:50pm

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Office Hours: Tue/Thur 10 - 11am in the LSRC (Hickory Hall) or by appointment

#### **HOW TO CONTACT ME**

Email is the **best way** to reach me. I typically respond to emails within **48 hours on weekdays** (Monday–Friday). If your question requires a detailed discussion, please come to my office during **scheduled office hours**. If you are unable to attend during regular office hours, you may **request an appointment** via email. Keep in mind that other students may also be waiting to meet with me, so scheduling ahead will help ensure that we have sufficient time for your questions.

#### **COURSE DESCRIPTION**

BIOL 1710 is the first half of a two semester, 1st year Biology sequence designed for science majors, students who require a biology class which will meet the requirements for Biology majors (e.g. premedical or other pre-professional students who may be completing a non-biology major). The intent of this course sequence is to provide the student with a broad background in biology that can serve as a prerequisite for higher-level courses in the field. This course is not designed for non-science majors.

#### **COURSE OBJECTIVES / LEARNING OUTCOMES**

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

- 1. Explain the foundational principles of biology
- 2. Analyze the molecular basis of life
- 3. Describe cell structure and function
- 4. Apply principles of energy flow and metabolism
- 5. Explain mechanisms of cell division and inheritance
- 6. Analyze the molecular mechanisms of gene expression and regulation
- 7. Integrate concepts of evolution into the study of biology
- 8. Demonstrate scientific reasoning and problem-solving skills

#### **COURSE MODALITY & MATERIALS**

#### Modality

This course will be delivered through **face-to-face lectures** held **twice a week**, with each session lasting **80 minutes**. Class time will include a mix of lectures, interactive discussions, and in-class activities designed to reinforce key concepts.

### Required/recommended textbook

Campbell Biology in Focus. 4th Edition, Urry, Cain, Minorsky, Orr and Hull. Published by Pearson, 2024. Available in ebook or print copy. If you would like a print copy, the University has negotiated a special price. You can purchase a loose-leaf version for \$20 through Mastering biology on Canvas. You will need to purchase Pearson's Mastering Biology program as well.

## Pearson's Mastering Biology program

Homework is through Pearson's Mastering Biology program. You will need to purchase this program through the bookstore or through Pearson directly. Homework assignments will be linked through Canvas.

## **Canvas**

All **lecture slides, announcements, assignments, and grades** will be posted on **Canvas**. You are expected to check Canvas **daily** for updates, as important course information will be communicated through this platform.

#### iClicker

Engagement, participation, and interaction are important elements of the learning process. We will use **iClicker** in this course, so each student must be registered and have a device (computer, smartphone, or tablet) ready for polling.

You may participate using:

- The iClicker Student App (iOS/Android)
- The iClicker Website (iclicker.com)
- An iClicker Device

When setting up your account, select **University of North Texas** as your institution and enter your **EUID** (Canvas login ID) in the *Student ID* field. Add this course to your list; it will appear each time you log in. Join the session at the start of class—connecting to UNT Wi-Fi is recommended.

Your iClicker participation counts toward your engagement grade. If you miss class, you miss that day's points; no make-ups will be given except in approved circumstances.

iClicker is to be used only for your own participation while present in class. Submitting responses for another student, having someone respond for you, or answering when absent is considered academic dishonesty and will be treated accordingly.

#### **CLASS POLICIES:**

All students in the course are expected to know and follow these course policies. These policies are in place to ensure a respectful, fair, and productive learning environment.

#### Attendance

- Attendance will be recorded during each class session, and students will receive two points for being present.
- Makeup work will only be provided for University-Excused Absences and must be arranged in advance whenever possible.
- Students with medical absences must provide **official documentation within one week** of the absence. Requests will be reviewed on a case-by-case basis.

## **Classroom Conduct**

- Cell phones, pagers, and other electronic devices must be silenced during class.
- Laptops, tablets, or phones used for note-taking or iClicker participation must be used only for class purposes.
- Be respectful of your classmates' ability to learn and your instructor's ability to teach. Disruptive behavior will not be tolerated.

## Late Work

- Late work will not be accepted. All due dates are clearly posted on Canvas—plan ahead to meet deadlines.
- If you encounter **technical problems**, contact your instructor or TA **immediately** and **before** the deadline.

## Exams

- Arrive at least **5 minutes before** the scheduled start time.
- At the instructor's discretion, students arriving late may not be allowed to take the exam.
- Once you begin the exam, you may not leave the room and return.
- All exams will be **closed-book**, **closed-notes**, unless otherwise specified.

#### **Academic Integrity**

- Each student must work **independently** on all assignments unless specifically instructed otherwise.
- Academic dishonesty, including cheating, plagiarism, and the use of Al tools to complete
  assignments will not be tolerated.
- Students found in violation may receive a **zero** on the assignment, and possible removal from the course and/or a report to the **Dean of Students Office**.

 If you are found to have plagiarized or improperly used AI, you will also be ineligible for extra credit for the remainder of the semester.

## **HOW TO SUCCEED IN THIS COURSE**

Success in this course depends on consistent engagement and active participation. Because biology is cumulative, each topic builds upon concepts introduced earlier, missing even one lecture can make later material more challenging to grasp. To give yourself the best chance of success:

- Attend every class
- Review lecture slides before class and take detailed notes during the lecture.
- Ask questions during class or email me if something is unclear.
- Study regularly
- Use office hours
- Form study groups

## **ASSESSMENT & GRADING**

Your final course grade will be based on a total of **500 points**, distributed as follows:

- **Exam 1** 100 points
- **Exam 2** 100 points
- **Exam 3** 100 points
- Exam 4 100 points (given during the university-assigned Final Exam time)
- Weekly Assignments & Activities 100 points

**Total Possible Points: 500** 

All exams will consist of multiple-choice questions (MCQs) and will be non-cumulative, covering only the material from each thematic block. Questions will be drawn from lectures, assigned readings, and in-class activities (including iClicker sessions). After you complete Exam 4, students may take an **optional cumulative test** in the remaining time. This grade may be used to replace the lowest grade from Exams 1, 2, 3 or 4.

Weekly quizzes are designed to reinforce key concepts and help you keep up with the material. Each one will count toward your final grade.

## **Extra Credit Opportunities**

Students may choose to participate in additional approved activities for extra points toward their final grade. These activities are optional and will be announced in class and/or on Canvas. Participation is encouraged for enrichment but is not required to earn a passing grade.

## **GRADE IN COURSE:**

Points	Percentage	Grade Letter grades assigned
450+	90%+	A
400-449	80-89.9%	В
350-399	70-79.9%	С
300-349	60-69.9%	D
<299	<60%	F

# **DISABILITIES ACCOMMODATION**

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of 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 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 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 see the Office of Disability Accommodation website at http://www.unt.edu/oda. You may also contact them by phone at 940-565-4323.

#### COURSE SCHEDULE

(Tentative – dates may shift)

- Lecture 1: Introduction & The Study of Life
- Lecture 2: Chemical Context of Life
- Lecture 3: Carbon and the Molecular Diversity of Life
- Lecture 4: Tour of the Cell

## **Exam 1: September 16, 2025**

- Lecture 5: Membrane Transport and Cell Signaling
- Lecture 6: Metabolism
- Lecture 7: Cellular Respiration
- Lecture 8: Photosynthesis

# Exam 2: October 14, 2025

- Lecture 9: The Cell Cycle
- Lecture 10: Meiosis and Sexual Reproduction
- Lecture 11: Mendel and the Gene
- Lecture 12: Chromosomal Basis for Inheritance

# **Exam 3: November 10, 2025**

- Lecture 13: Molecular Basis of Inheritance, Gene Expression
- Lecture 14: Gene Regulation and Evolution
- Lecture 15: Evolution and Review

Final Exam: December 9, 2025 (1:30-3:30pm)

**Note:** Dates for exams 1-3 may change depending on the pace of the course. However, **exam** dates will never be moved earlier than the published date.

## **EAGLE ALERT & CALENDAR CHANGE STATEMENT**

If UNT closes due to weather or emergency, you will be notified through Eagle Alert. The course schedule is subject to change.

#### COPYRIGHT NOTICE

Materials in this course are for enrolled students' use only and may not be shared, distributed, or retained beyond the semester.