

Syllabus BIOL 5394 – Biological Research

Fall 2025

Instructor:

Dr. Lance R. Williams, BEP 129, Phone – 565-5878, Email – lwilliams@uttyler.edu

Office Hours: T R 9:30-11, or by appointment.

Course Description: Emphasis on proposal writing and research in biology.

Course Objectives/Student Learning Outcomes:

- (1) Read and process scientific literature for a literature review.
- (2) Learn the basics of scientific writing.
- (3) Prepare a proposal presentation & draft of a thesis proposal, or a thesis presentation & draft of a thesis.
- (4) Understand what it means to be a scientist.

Required Texts: None

Evaluation: Students will be evaluated based on the following work:

1. Participation will count for 30% of the grade. This will include independent research with your advisor.
2. A power point presentation of your proposal, part of your thesis, or part of your literature review (depending on whether you are a 1st year thesis, a 2nd year thesis, or a non-thesis graduate student) will count for 35% of the grade.
3. Finally, a written draft of your proposal, part of your thesis, or part of your literature review will count for the remaining 35%. If you will be absent from class, please let me know in advance. Some of the class will involve independent research with your advisor.

We will follow a 10-point scale for grading:

90-100% = A, 80-89% = B, 70-79 = C, 60-69% = D, 0-59% = F

Academic Misconduct: Submitting plagiarized work to meet academic requirements including the representation of another's work or ideas as one's own; the unacknowledged word for word use of another person's ideas; and/or the falsification, fabrication, or dishonesty in reporting research results shall be grounds for charges of academic misconduct. Any cheating or other type of academic misconduct will be reported to university administration and at minimum will result in automatic failure of the course.

TENTATIVE CLASS SCHEDULE

<u>Week</u>	<u>Lecture Topics</u>
Aug 25	Introduction & scientific writing
Sept 1	Labor Day
Sept 8	Writing and planning for research
Sept 15	<i>No class – work with advisor – title and brief summary</i>
Sept 22	Proposal planning and presentation
Sept 29	Effective talks and posters

Oct 6	<i>No class – work with advisor – elevator speech</i>
Oct 13	Presentations of elevator speech
Oct 20	<i>No class – work with advisor - presentation</i>
Oct 27	<i>No class – work with advisor - presentation</i>
Nov 3	Literature review
Nov 10	In class presentations
Nov 17	In class presentations
Nov 24	Thanksgiving break
Dec 1	Final paper due