

BIOL 4101 Seminar-Integrative Biology Spring 2026 (1 credit)

Contact Information

Instructor: Dr. Ashley Teufel

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Office: 311C SciTech

Office Hours: 12:00pm-2:00pm and 3:30pm-5:00pm Thursday or by appointment

Course Meeting Time: SciTech 223 Thursday 11:00 am - 11:50 am

Course Description

Student-led reviews of current scientific literature on various topics in biology with critical class analyses. Students will refine their ability to search, read, understand, discuss and critique the primary scientific literature, both orally and in written form. Prerequisite(s): BIOL 3402 and ENGL 2311 or ENGL 1302 must be completed first.

Course Objectives

This course is designed as a writing intentional course in order to give students maximum opportunity to hone their scientific skills by accessing the scientific research literature directly and communicating their understanding of these scientific articles in written form. As such, class periods will include workshops aimed at improving scientific writing as well as student-driven discussion with my role as facilitator. For effective discussion, all students must come prepared for each class by reading the assigned article(s) in sufficient depth to participate knowledgeably.

Attendance Policy

Synchronous attendance is mandatory, and points will be assessed every discussion period. If you have a documented university-excused absence, you will not be penalized for attendance, but you will still be responsible for make-up work.

Course Components

Workshops

There will be 3 in-class workshops designed to teach aspects of the course required for performance assessment. Some workshops have out-of-class assignments associated with them (see below). These workshops cannot be made up.

Discussions

You will be responsible for leading one discussion based on one journal article you have selected. You will submit three articles as pdfs, from those three, I will select which article you will be leading a discussion on. The article will be posted on the course website a week prior to

the discussion for your classmates in order to give them a week to read it. You will lead the discussion for 1/2 of the class period.

Preparation for the Discussion

You will submit annotations of each of the articles containing writing questions and comments prior to discussion. This annotation will both prepare you for the discussion, and provide evidence of your preparation. If there are terms or other things you do not understand in the paper, be sure to look them up and include them in the annotation. You may annotate the paper by writing directly in the margins of the PDF, alternately you can write your annotations in a text file. In your annotation include two questions or thoughtful comments you had about each article. A file containing your annotations must be submitted prior to the discussion.

Relative Contribution to the Discussion

In recognition of potential learning by listening to the discussion, and providing an audience, you will earn points for each pair of discussions that you attend and participate in (there are 2 discussions per class period). Additional points will be earned by thoughtfully participating during the discussions. This participation can include asking a good question or making a supportive or critical comment about the paper being discussed or mentioning outside material that adds to the discussion.

Journal Article Critiques

You will write two papers that analyze scientific journal articles. The workshops will help in how to write these. For Critique 1, you will participate in a peer review where you will receive feedback from your classmates. You will then have the opportunity to revise your critique based on this feedback before submitting it for grading.

Grading

Assignment	Points Each	Total Points
Workshop attendance	20 pts x 3	60 pts
Pre-discussion annotations	20 pts x 12	240 pts
Pre-discussion questions	20 pts x 12	240 pts
Discussion attendance	10 pts x 12	120 pts
Contribution to discussion	30 pts x 3	90 pts
Peer review participation	100 pts x 1	100 pts
Article summary	50 pts x 1	50 pts
Journal article critiques	150 pts x 2	300 pts
Discussion leader	300 pts x 1	300 pts
TOTAL		1500 pts

Grades will be assigned at the end of the term based on the percentage of points earned, where 90% = A, 80% = B, 70% = C, and 60% = D.

Schedule

Date	Class Activity	Large Writing Assignments Due
Jan. 22	Syllabus & AI usage	
Jan. 29	WS 1: Searching for scholarly journal articles & reading and annotating articles	
Feb. 5	WS 2: How to write critiques and peer review	3 articles w/ brief description
Feb. 12	WS 3: Leading and contributing to discussions	
Feb. 19	Discussion 1 and 2	
Feb. 26	Discussion 3 and 4	Article summary
Mar. 5	Discussion 5 and 6	
Mar. 12	SPRING BREAK	
Mar. 19	Discussion 7 and 8 (Peer review critique 1)	Critique 1 draft
Mar. 26	Discussion 9 and 10	
Apr. 2	Discussion 11 and 12	Critique 1 final
Apr. 9	Discussion 13 and 14	
Apr. 16	Discussion 15 and 16	
Apr. 23	Discussion 17 and 18	
Apr. 30	Discussion 19 and 20	Critique 2
Finals	Discussion 21-24 5/12 – 10:00am-11:50am	

Important Policies and Resources

Broader Use of Generative AI Permitted Within Guidelines

Use of artificial intelligence (AI) tools, including ChatGPT, is permitted in this course for students who wish to use them. To adhere to our scholarly values, students must cite any AI-generated material that informed their work (this includes in-text citations and/or use of quotations, and in your reference list). Using an AI tool to generate content without proper attribution qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

University Policies

FOR UNIVERSITY POLICIES SEE DOCUMENT ON BLACKBOARD