

## **BIOL 4101 Seminar-Integrative Biology Fall 2026 (1 credit)**

**Instructor:** Dr. Ashley Teufel

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**Office:** 311C SciTech

**Office Hours:** M 5:00-7:00PM, W 1:30-3:00PM

or by appointment

**Course Meeting Time:** SciTech 131 Wednesday 12:30-1:20pm,

### **Course description:**

Student-led reviews of current scientific literature on various topics in biology with critical class analyses. Prerequisite(s): BIOL 3305 and ENGL 2311 or ENGL 1302 must be completed first.

TSI Restriction(s): Reading, Math, and Writing

### **Course objectives:**

This is a Writing-Intentional (WI) course designed to help you use writing as a tool for learning course content and to continue developing your writing skills within your major. Throughout the semester, you will engage in various forms of writing and actively practice the writing process. During this course, you will:

- 1) Compose for multiple audiences to achieve a variety of purposes. This will require you to employ a variety of genres unique to their disciplines and fields of study, employing both print and digital media.
- 2) Employ context-specific expectations of grammar, sentence structure, punctuation, and spelling as key facets of effective prose.
- 3) Evaluate and ethically integrate sources into their writing that reflect multiple perspectives. Students will integrate sources using both summary and analysis.
- 4) Develop and employ writing processes that are appropriate for the types of writing they will be asked to complete within their discipline and field of study.
- 5) Successfully engage in discipline-specific collaborative writing practices.
- 6) Write reflectively as a means of building a more robust understanding of yourself as a writer.

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.

**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. 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     | Total Points |
|------------------------------------|------------|--------------|
| 3 articles with short descriptions | 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  |
| Reflection on writing process | 50 pts x 1  | 50 pts   |
| Written critiques             | 150 pts x 2 | 300 pts  |
| Discussion leader             | 300 pts x 1 | 300 pts  |
| <b>TOTAL</b>                  |             | 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                       |
|-----------|----------------------------------------------------------------------------------|-----------------------------------------------------|
| Aug. 26   | Syllabus & AI usage                                                              |                                                     |
| Sep. 2    | WS 1: Searching for scholarly journal articles & reading and annotating articles |                                                     |
| Sep. 9    | WS 2: How to write critiques and peer review                                     | 3 articles w/ brief description                     |
| Sep. 16   | WS 3: Leading and contributing to discussions                                    |                                                     |
| Sep. 23   | Discussion 1 and 2                                                               |                                                     |
| Sep. 30   | Discussion 3 and 4                                                               |                                                     |
| Oct. 7    | Discussion 5 and 6                                                               | Critique 1 Draft                                    |
| Oct. 14   | Discussion 7 and 8                                                               |                                                     |
| Oct. 21   | Discussion 9 and 10                                                              | Peer Review Critique 1                              |
| Oct. 28   | Discussion 11 and 12                                                             |                                                     |
| Nov. 4    | Discussion 13 and 14                                                             | Critique 1 Revision & Reflection on writing process |
| Nov. 11   | Discussion 15 and 16                                                             |                                                     |
| Nov. 18   | Discussion 17 and 18                                                             |                                                     |
| Nov. 25   | Study Day - No Class                                                             |                                                     |
| Dec. 2    | Discussion 19 and 20                                                             | Critique 2                                          |
| Dec. 5-11 | Finals: Discussion 21-24 (time TBA)                                              |                                                     |

## **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.

**FOR UNIVERSITY POLICES SEE DOCUMENT ON BLACKBOARD**