

BIOL 385: Senior Seminar in Biochemistry

Spring 2021, Wed 10:30am-11:20am ISC 136

Instructor **I**
Travis Bailey Phone: 585-245-5437
Office: ISC 350 email: baileyt@geneseo.edu
Office hours: Mondays 10:30 – noon, Tuesdays 11:30 am – 1 pm

Course Description (1 credit)

Discussion of current literature, recent advances, perspectives, or selected topics in Biochemistry.

Prerequisites: senior standing in Biology, Chemistry, or Biochemistry and CHEM 302 and CHEM 304.

Course Objectives

By the end of this course you will be able to:

- (1) Find, understand, and analyze scientific literature from respectable sources, with an emphasis on current topics in biochemistry.
- (2) Understand and interpret data from scientific articles, and explain how it relates to the main hypothesis of the article.
- (3) Evaluate the strengths and weaknesses of a scientific article.
- (4) Be able to communicate an original, written analysis of articles from the primary literature.
- (5) Respond to feedback from reviewers of your work.
- (6) Analyze and give thoughtful, constructive criticism to your peers.

Grading

Weekly Participation	14 points
Assignment 1 (article discussion questions)	6 points
Assignment 2 (find three articles related to topic)	5 points
Assignment 3 (proposal of paper topic)	5 points
Assignment 4 (group article discussion)	10 points
Assignment 5 (draft 1 of paper due, for peer review)	10 points
Assignment 6 (peer review of term paper draft)	10 points
Assignment 7 (oral presentation on topic)	20 points
Assignment 8 (final version of paper)	<u>20 points</u>
Total	100 points

The following scale will be used to calculate final grades. Student point totals or grading scheme may be adjusted to reflect course difficulty at the instructor's discretion.

A (93-100%)	A- (90-92%)	
B+ (87-89%)	B (83-86%)	B- (80-82%)
C+ (77-79%)	C (73-76%)	C- (70-72%)
D (60-69%)		
E (<60%)		

- Grade disputes must be initiated within one week from when the assignment was returned.

Attendance and Participation

Attendance for this class is mandatory. Missing class without permission of the instructor will result in a 2-point deduction from your participation grade for each absence. For approved absences, students must make arrangements with the instructor to make up any missed assignments.

Participation makes up a significant portion of your practice and learning. A seminar style class such as this one simply does not work well, and frankly is not any fun, if you don't participate. The purpose of this course is to help you learn researching and communication by argumentation with your peers. Each week you can earn 1 point for participation by speaking during class – it is expected that you ask a question, answer a question, or speak up during a discussion at least once during class every week (hopefully more!).

Turning in Assignments

Assignments **MUST** be uploaded by the beginning of class, or you will not receive credit for the assignment. A printout is unnecessary.

Accessibility

SUNY Geneseo is dedicated to providing an equitable and inclusive educational experience for all students. The Office of Accessibility will coordinate reasonable accommodations for persons with physical, emotional, or cognitive disabilities to ensure equal access to academic programs, activities, and services at Geneseo. Students with letters of accommodation should submit a letter to each faculty member and discuss their needs at the beginning of each semester. Please contact the Office of Accessibility Services for questions related to access and accommodations.

Erwin Hall 22
(585) 245-5112

access@geneseo.edu

www.geneseo.edu/accessibility-office

Academic Dishonesty & Plagiarism

Students are expected to adhere to the University's policy on academic dishonesty and plagiarism, located in the student handbook. Academic dishonesty and plagiarism have serious consequences, and if you're struggling in class, please ask for help rather than resort to academic dishonesty! Academic dishonesty will result in a zero on the assignment or exam. In addition, a report will be filed to the department chair and Dean of the College, and a record of academic dishonesty will be placed in the student's file at the Dean of Students Office.

Tentative Schedule of Topics (subject to change at instructor's discretion):

Feb 3 Topics:

Introduction, description of course assignments and requirements
Discussion about journals, the types of scientific articles, and how to find them
Form groups and find out group paper discussion dates

Assignments for next week:

- **Assignment 1: Read Paper #1** (by Wolfe-Simon et al.) and answer discussion questions. Upload answers to Canvas
 - Brainstorm about the term paper / presentation topic would like to explore this semester.
 - Begin to think about optimal date for individual presentation (see available dates on the syllabus)
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Feb 10 Topics:

Assignment 1 due.

Discussion of paper by Wolfe-Simon, et al.

Assignment of dates for individual oral presentations

Assignments for next week:

- **Read paper by Weissgerber**, et al and answer discussion questions
 - **Assignment 2: Find at least three articles** relating to your potential paper / presentation topic and write up citations for them.
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Feb 17 Topics:

Assignment 2 due. Submit to Canvas

Discuss paper by Weissgerber, et al.

For next week: science in the news, we'll choose the topic as a class

Assignments for next week:

- **Read news article and the scientific paper that the article covered**
 - **Assignment 3: Choose a topic** for your paper / presentation
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Feb 24 Topics

Assignment 3 due. (paper topic).

Discussion of science in the news.

Assignments for next week:

Group 1 Assignment 4 – email me copy of paper you chose and discussion questions

by Friday, Feb 26th at 1 pm.

Mar 3 Topics

Group 1 – Assignment 4 (paper presentation and discussion questions)

Assignments for next week:

- **Everyone: Assignment 5 Turn in in first draft of paper next week, for peer review**
 - **Group 2 Assignment 4 – email me copy of paper you chose and discussion questions** by Friday, Mar 5th at 1 pm..
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Mar 10 Topics

Group 2 – paper presentation and discussion questions

Assignment 5 due - turn in draft of paper to Canvas, for peer review

Assignments for next week:

- **Assignment 6 - comments back to peers on draft**
- **Group 3 Assignment 4 – email me copy of paper you chose and discussion questions** by Friday, Mar 12th at 1 pm.

Mar 17 Topics

Group 3 – paper presentation and discussion questions

Assignment 6 due: turn in comments/peer review on written presentation draft 1.

Assignments for next class (two weeks):

Group 4 Assignment 4 – email me copy of paper you chose and discussion questions

by Friday, Mar 12th at 1 pm.

Mar 24 Rejuvenation Day, no class

Mar 31 Topics

Group 4 – paper presentation and discussion questions

Assignments for next time

The first draft of your oral presentation (presentations start on April 14). **Work on your slides and the flow of your narrative.** Be ready to share your draft.

Apr 7

Discussion: What makes a good presentation? Workshop and peer review, bring your current version of your slides to show to another student. View their slides. Give and take feedback

Assignments for next week

First student presents next week Assignment 7.

Apr 14 **Assignment 7 begins:** (Student oral presentations) #1 and 7

(Optional) 2nd draft submitted for random peer review. You must commit to giving feedback to another student if you use this option.

Apr 21 Student presentations #2 and 8

Apr 28 Student presentations #3 and 9

May 5 Student presentations #4 and 10

May 12 Student presentations #5 and 11

Assignment 8 final version due

May 20* (8-10:30 am) Student presentations #6, 12, and 13
