Bio 490 – Spring 2024

SENIOR PROJECT SPRING 2024

Department of Biology @ CSU Dominguez Hills

Class time and location: TuTh 1p - 2:15p (LCH A219)

Instructor: Dr. Sonal Singhal

Office hours:
Office:
Phone:

E-mail:

Course Description

This course will use cover all the final information you should learn before graduating with your biology degree. Topics include: how do you find information & evaluate if it is trustworthy? How do you turn your biology degree into a career? What is your responsibility (if any) as a biologist in modern society? Throughout these explorations, we will focus on improving our writing and on giving others feedback on their writing.

From the course catalog: Application and assessment of previously learned material in courses required in biology and general education. Activities such as the design and conduct of an experiment requiring statistical analysis, resume writing, oral presentations on career choices, and critiques of classmates presentations. 2.5 hours of lecture per week.

Prerequisites: Senior Biology student status with proof of filing for graduation, or by permission of the instructor.

Student Learning Objectives

After finishing this class, you should be able to:

- Find, read, understand, critically evaluate, summarize, and use scientific information in different genres of biological writing
- Analyze and interpret quantitative biological data to be used in biological discourse
- Communicate a knowledge base in biology to members of the community through writing
- Identify and communicate about ethical issues in science
- Communicate an argument for the relevance of scientific research to society through persuasive writing
- Communicate career goals and qualifications
- Determine where and how to find information for graduate or professional schools or advanced careers
- Write in standard formats used to build careers in biology (e.g., resume or CV, personal statement, and cover letter)

Materials

Required Material:

None, but please have access to a computer or tablet. The school has some you can borrow for free! https://techloaner.csudh.edu/

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Classroom Polices

Come to class ready to learn. This means arrive on time, don't have distracting side conversations, and avoid using your phone when I am lecturing or we are having class discussions. When you can, let me know if you have to miss class. While I do not require attendance, learning at home by yourself will be less fun and less effective.

Grading

Writing assignments: There will be four writing assignments, each of which will have slightly different specifications and each of which covers a different topic. You will have 3 – 4 weeks to work on each writing assignment.

CAREER WRITING personal statement or cover letter

WRITING FOR SCIENTISTS literature reviews, grants, reports, etc.

WRITING FOR NON-SCIENTISTS blog post, news article, storybook, etc.

PERSUASIVE WRITING editorial, blog post, etc.

Each of which will have a clear rubric. Both you and I will evaluate your writing assignment on a scale of 0-4. Each writing assignment will be worth **0 points**.

Why all the assignments are worth 0 points: This is an ungraded class, which means you will be deciding your grade in the class in collaboration with me. We will discuss why we are doing this and how it will work in class. For now, the most important thing to remember is that letter grades still mean the same as they would in a more standard class: an A, B and C reflect excellent, good, and passing work, respectively. You need a C or higher to pass this class.

Extra credit: There will be no extra credit given in this class.

Recommendations for Success

How can you be successful in this class?

- **Follow the suggested schedule.** I built a lot of flexibility into this class, but if you let work build up, it will become too much and become hard to manage.
- **Listen to your peers' suggestions.** I have learned that your fellow Biology Toros give much better suggestions & advice on your writing than I ever could. Listen to your friends!
- **Come visit me in my office, SCI 210.** Chatting one-on-one can be easier than chatting in class, and sometimes, focused attention can help resolve sticky points in a writing assignment.
- **Go to the Writing Center.** The Writing Center on campus (https://www.csudh.edu/writing-center/) offers one-on-one consulting meetings to help you develop your writing.
- Contact me when life gets complicated and focusing on school becomes hard. You don't need to tell me what is going on, but you do need to tell me that you need extra support or time to finish up the class.
- Take advantage of revisions. Like most things in life, writing takes time and effort. (Think about it this way: most people cannot run a marathon after the first time they go to the gym.) I designed this class to give you multiple times to express your ideas in writing and then to revise your initial drafts. Be sure to take the time to do revisions, as necessary.
- **Have fun!** There are no exams & I offer revisions in this class on purpose. Stress makes it harder to learn. I am trying to create a less stressful environment for you to learn.

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Tentative Schedule			
Date	Module	Topic	Due
Tue., Jan. 23	Introduction	Why BIO?	
Thu., Jan. 25	Introduction	What's next?	
Tue., Jan. 30	Career	Plan A	
Thu., Feb. 1	Career	Resume or CV	
Tue., Feb. 6	Career	Personal Statement	
Thu., Feb. 8	Career	Cover Letter	
Tue., Feb. 13	Career	List of Schools or Employers / References &	
		Recommendations / LinkedIn	
Thu., Feb. 15	Career	Plan 0 and Plan B	
Tue., Feb. 20	Career	Peer & Self-Feedback Day	
Thu., Feb. 22	Writing for Biologists	Finding a Unique Voice (incl. ethical uses of ChatGPT)	
Tue., Feb. 27	Writing for Biologists	How to write technically (what is technical writing, main ideas, threading)	Assignment 1
Thu., Feb. 29	Writing for Biologists	Brainstorming Day	
Tue., Mar. 5	Writing for Biologists	Paraphrasing (and how to read / skim effectively)	
Thu., Mar. 7	Writing for Biologists	Avoiding Plagiarism (in-text citations, Works Cited)	
Tue., Mar. 12	Writing for Biologists	Finding & Evaluating Sources 1	
Thu., Mar. 14	Writing for Biologists	Finding & Evaluating Sources 2	
Tue., Mar. 19	Writing for Biologists	Peer & Self-Feedback Day	
Thu., Mar. 21	Writing for non-Biologists	Types of Science Communication	
Tue., Mar. 26	Writing for non-Biologists	Science Communication	Assignment 2
Thu., Mar. 28	Writing for non-Biologists	Brainstorming Day	
Tue., Apr. 2		Spring Break	
Thu., Apr. 4	Spring Break		
Tue., Apr. 9	Writing for non-Biologists	Science Communication	
Thu., Apr. 11	Writing for non-Biologists	Visual Appeal	
Tue., Apr. 16	Writing for non-Biologists	Peer & Self-Feedback Day	
Thu., Apr. 18	Science & Society	Biology & Society	
Tue., Apr. 23	Science & Society	Racism & Sexism & Colonialism (case studies)	Assignment 3
Thu., Apr. 25	Science & Society	Brainstorming Day	
Tue., Apr. 30	Science & Society	Ethics in Biology (case studies)	
Thu., May 2	Science & Society	Misuse of data in Society	
Tue., May 7	Science & Society	Peer & Self-Feedback Day	
Thu., May 9	Close-Out	Show & Tell	Assignment 4 & Exit Survey
Tue., May 14		Revisions & Self-Assessment due at 11:59p	Ž

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University Policy

Academic Integrity: This course will be conducted in accordance with the University Policy on Academic Integrity (p.14 University Catalog). Any student caught cheating or plagiarizing will receive an F (0 points) on the assignment and will be penalized according to University regulations. Cheating or plagiarism is subject to discipline as provided in Title 5, California Code of Regulations. Plagiarism is a very serious offense. See the University Catalog under Academic Integrity for further information.

Exams: no cellphone use of any kind is allowed during exams. Cellphones will be turned off and secured in your bookbag, which will be placed on the floor for the duration of the exam.

Plagiarism: it is imperative that you cite all your sources on assignments. Academic misconduct of any kind, including cheating on exams and plagiarism, <u>will</u> result in a grade of F for the course, and possibly other sanctions. Once you have completed this course, do not share assignments etc. with students in subsequent semesters. If anyone turns in your assignment in a future semester, you will be held accountable and face sanctions.

Disruptive Students: Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. The instructor may require a student responsible for disruptive behavior to leave class pending discussion and resolution of the problem and may report a disruptive student to the Student Affairs Office (WH A-410, 310-243-3784) for disciplinary action.

CSUDH adheres to the Americans with Disabilities Act with respect to providing reasonable accommodations for students with temporary and permanent disabilities. To receive accommodations, students with disabilities must register with Students disAbility Resource Center. For more information, please contact their office in Welch Hall D-180 at (310) 243-3660 (voice) or (310) 243-2028 (TDD).

Computer/Information Literacy Expectations for Students enrolled in this class: Students in this class are expected to:

- Use assigned Toromail account or other university approved email.
- Have ability to navigate and use Blackboard.
- Have basic information and computer literacy in one of the computer formats (Windows, Macintosh, or GNU/Linux).
- Upload files in all of the computer formats (.doc, .docx, .jpeg, .ppt, .pdg, .xps).
- Access and choose appropriate library and other scholarly sources of information.
- Search for and find relevant scholarly information effectively.
- Be able to paraphrase concepts without plagiarizing.
- Maintain the minimum computer Hardware requirements*
- Maintain the minimum computer Software requirements*

*Please visit http://www.csudh.edu/academic-technology/instructional-technologyresources/online-courses-tech/ for the most up-to-date Hardware & Software computer requirements