

BioSci 100: Scientific Writing

This is an archive copy. Current students should look at syllabus on the class website.

Standard Information:

Fall 2019 (05400)

Lecture (ALP 1300) M W F 9:00 - 9:50 am

Instructor: Professor Adrienne Williams

adriw@uci.edu

Office hours: McGaugh 4248 Thurs 12:30-1:30pm, Friday 10-11am

Course Learning Goals:

By the end of this course, students will be able to:

1. Describe the elements found in each section of a scientific paper / lab report
2. Read an experimental biology paper and research its components enough to be able to describe in writing the background, hypothesis and the findings to another Bio 100 student

Course Materials:

- Book: None required.
- A laptop or Chromebook is required every day in class

Course Structure:

This course was originally designed to prepare Bio Sci majors to write lab reports in upper-division lab courses. My bigger goal is to increase your confidence in using reading and writing skills important to biologists (and medical professionals, and entrepreneurs and teachers and other interesting jobs). You will thoughtfully practice how to find and read primary and secondary articles in a complex discipline, and practice writing and editing clearly and concisely.

Because this course is taught in a large lecture format, the instructors and TAs cannot provide regular one-on-one feedback to each of you on your writing. Instead, we will maximize your on-task writing by having daily writing assignments in class, with regular, general feedback on multiple sample submissions. There will be no large take-home papers, but there will be out-of-class work in the form of regularly assigned journal articles for you to study.

The class will be active. You will spend much of class time writing. You will often be asked to work with a partner or group to summarize, outline, write or edit an assignment. You may be assigned a partner rather than getting to work with a friend. You may be asked to not Google answers to some class activity questions. You are always expected to write using your own words and not copy the text of papers you read. You will be regularly invited to submit small research and writing responses via Canvas discussions. In general, I encourage you to approach every class ready to research, think, communicate and write.

Grading

Your grade will not be based on a few large writing assignments. Instead, you will be turning in smaller, in-class writing projects nearly every day. Some will be graded merely for high-quality participation, others will be graded based on your ability to follow the directions of the assignment and write clearly and concisely.

In many STEM classes, the number of A's and B's are artificially capped by curving. This is not true in this course. I will make sure the points awarded for each assignment are appropriate and achievable by students. Grades will then be awarded via a straight scale, with no limit on the number of A's or B's.

Course components are weighted as follows:

Activity	% of Course Grade
Paper Quizzes	58%
In-class Writing	35%
Participation Discussion posts	5%
Surveys, feedback, etc.	2%

The grading scale will be no higher than this, and may drop lower (more generous) if I feel it is necessary.

A+ 98 – 100 %	B+ 88 – 89.9 %	C+ 78 – 79.9 %	D+ 66 – 69.9 %
A 94 – 97.9 %	B 84 – 87.9 %	C 74 – 77.9 %	D 63 – 65.9 %
A- 90 – 93.9 %	B- 80 – 83.9 %	C- 70 – 73.9 %	D- 60 – 62.9 %
			F Less than 59.9 %

Research paper quizzes are given in class in Canvas every week and require you to have read and understood the research paper assigned the week before. There will be a variety of questions on the quiz. You may be asked about the paper's biology, the research question, or the logic of the discussion. You may be asked to explain one of the figures. You might be given the introduction and told to summarize it in 150 words. We will discuss in class how to prepare for these quizzes and how they will be graded. Points will be removed if too similar to the assigned reading or other writing.

Canvas Discussions will be used for short-answer in-class activities that aren't full writing activities. If you are asked to find a journal article, you might be told to submit the citation as the discussion post. If your group feels the appropriate figure for some given data is a histogram, you might submit this information along with the X and Y axes labels. Full credit will be given for reasonable answers.

In-class writing will be focused, independent writing assignments of about 45 minutes on different aspects of scientific writing. You may be summarizing an existing article or drafting a section of a lab report or editing an existing draft. You will be graded on how well you followed the prompt and the clarity and conciseness of your writing. Not all writing assignments will be

graded, but you should assume all will be because the grading will not be announced beforehand. Points will be removed if too similar to the assigned reading or other writing. Your lowest writing assignment score will be dropped.

Final exam day will be reserved for an **optional** makeup paper quiz of the same format and difficulty as the other paper quizzes. If you are happy with your grade going into finals week you do **not** need to attend the final exam time or take this quiz.

Regrades

Grading writing is more difficult and subjective than grading in most biology courses. We will strive to provide our grading rubrics for assignments and TAs split assignments to grade all students with the same rigor. We grade assignments with student names hidden. If you see a possible error in your grade, you should ask a TA to clarify within 1 week of the grade release. We will fix clear errors, but because we strive to provide similar criteria across all student submissions we will not argue with you over whether you deserved a 4 instead of a 3 on a quiz question. We will not discuss regrades at the end of the quarter in order to get you enough points to get the next higher grade. We will not regrade more than one assignment per student.

Saving student work

I will save and anonymize samples of student writing each quarter to give as activities to students in future courses. These will not contain any identifying information. If at the end of the quarter you are uncomfortable with having your assignments used in this way, I will have a form for you to indicate this without any negative impact on your grade.

Makeup Work

Life events can interfere with course attendance, but providing multiple makeup opportunities for 400 students is an unmanageable administrative burden. In order to balance these issues, I offer a small number of makeup opportunities.

1. You may make up one paper quiz. This makeup will occur during our final exam day and time. You may only make up a paper quiz if you scored less than 25% of the points for that quiz or missed it due to absence. You will choose which quiz to replace when you take the makeup, and your makeup score will replace the chosen score even if it is lower.
2. You may make up one writing assignment **missed** because of a valid excuse, in addition to the automatically dropped lowest grade. Writing assignments can only be made up if missed, not because of a low grade. The makeup must occur within 7 days of the missed assignment. If you are traveling for interviews or sports or have a religious event you can make the assignment up early. If you are sick or have a crisis absence, you can make it up afterwards. The makeup must occur during my office hours, and must be arranged with me before the office hour. The replacement assignment may be different or **more difficult** than the assignment you missed. It may require you to read another assigned paper. It is your responsibility to arrange a makeup with me.

There will be no additional makeup opportunities. There will be no makeup opportunities for participation or surveys. Makeups cannot be used to increase a grade from A to A+. If you miss multiple days and have a valid excuse with paperwork (significant illness, family tragedy) you

may take an incomplete and finish the class the following quarter. Family trips do not qualify as a valid excuse. Adding this class late does not excuse you from missed assignments.

Course Schedule

This schedule may change slightly, but the general format should remain the same.

Week	Day	Date	Topic of the Day	Week	Day	Date	Topic of the Day
0	F	Sept 27	01 Introduction, goals, research	6	M	Nov 4	12 Editing a methods section
1	M	Sept 30	02 What is a scientific paper?		W	Nov 6	Paper Quiz
	W	Oct 2	Paper Quiz		F	Nov 8	13 Paper Org: Results
	F	Oct 4	03 Learning biology from a paper	7	M	Nov 11	Veterans Day
2	M	Oct 7	04 Using Figure Facts to guide reading		W	Nov 13	Paper Quiz
	W	Oct 9	Paper Quiz		F	Nov 15	14 Summarizing a results section
	F	Oct 11	05 Paper Org: Title, authors, abstract	8	M	Nov 18	15 Creating effective figure legends
3	M	Oct 14	06 Paper Org: Introduction		W	Nov 20	Paper Quiz
	W	Oct 16	Paper Quiz		F	Nov 22	16 Generating a figure
	F	Oct 18	07 Summarizing an introduction	9	M	Nov 25	17 Paper Org: Discussion
4	M	Oct 21	08 Finding articles for a paper		W	Nov 27	Paper Quiz
	W	Oct 23	Paper Quiz		F	Nov 29	Thanksgiving Holiday
	F	Oct 25	09 Building knowledge in an introduction	10	M	Dec 2	18 Summarizing a discussion section
5	M	Oct 28	10 Paper Org: Methods		W	Dec 4	Paper Quiz
	W	Oct 30	Paper Quiz		F	Dec 6	19 Reference managers
	F	Nov 1	11 Practicing a methods section	Finals	W	Dec 11	9 am - "Final Exam Day" makeup

Education Research

As a Professor of Teaching, I conduct research on teaching effectiveness in undergraduate courses. Part of this research is surveying students on biology, motivation, attitudes toward writing or other characteristics. This information is combined with student performance in the class, and demographic information like gender, GPA and major. Not only does this provide me information that allows me to determine if I have improved this course, but publishing this research can help other institutions also teach more effectively. You receive course credit for completing these surveys and assignments. All published information is given in aggregate and is anonymous. The study information sheet for these research projects is posted on the class Canvas site. If you would prefer your surveys and assignments not be included in my published research, you are welcome to opt out by contacting Dr. Kameryn Denaro at the Teaching and Learning Research Center (kdenaro@uci.edu). She will collect your name and ID, but not tell me until after the course has ended who has opted out. Your grade will not be affected if you choose to not have your surveys or course materials included in my research.

Course Policies:

Valuing yourself and others

I would like to create a learning environment that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.) To help accomplish this:

- If you have a name and/or set of pronouns that differ from those that appear in your official UCI records, please let me know.
- I will have all students make and use name tents at their seat so the instructional team and other students can learn names and connect more easily.
- We welcome students from around the world and recognize that students from other cultures and countries bring a richness of perspective to our class. Writing well in a non-native language can be especially challenging, so please seek help from me if you are finding the assignments to be difficult to understand or complete.
- I have designed the grading to be competition-free. There is no limit on the number of good grades I will assign. Please be generous in offering help, advice and encouragement to your classmates during group work.
- If a class time conflicts with an important religious event, please let me know during the first week of class so we can make alternate arrangements.
- I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that made you feel uncomfortable, please talk to me about it. (Again, anonymous feedback is always an option).
- Students who have a disability or other condition necessitating accommodation are encouraged to discuss their needs with the Disability Services Center. I will work with you and the DSC to make arrangements.

Email interactions with instructional staff

You are welcome to contact me or the TAs with questions or issues. When doing so, please include the name of the course and a summary of the issue in the subject line. Use only your UCI email or Canvas to contact us, rather than a personal email. If your Registrar/Canvas name is different than the name you regularly use, please include both in your email. In your greeting, I ask you to call me Dr. Williams or Professor Williams.

Attendance

Attendance is vital to your performance in this class. I don't take attendance directly, but submission of the Canvas assignments can only be completed by students in the class. Submitting class assignments when you are not in class without clearing it with me beforehand will be considered academic dishonesty.

Adding this class late does not excuse you from missed assignments. I do not recommend adding after the first day is over (summer session) or the first week is over (10-week quarter).

Academic integrity

University coursework can be very stressful. Please do not consider academic dishonesty as a possible solution to your difficulty in completing assignments. Academic dishonesty will result in a) the student(s) earning a zero on the assignment, b) the student(s) earning a zero in the assignment category (such as all Discussion Participation assignments), and c) my reporting you to the Office of Academic Integrity for possible suspension or dismissal.

Examples of academic dishonesty in this class include but are not limited to sharing your activity answer with a friend in the class when told to work independently, trying to complete in-class assignments when not in class, or hiring someone to do your writing for you.

Plagiarism can also be an issue when students are asked to write. If the instructional staff finds evidence that you are plagiarising (copy-pasting text, trying to change the copied text enough to

foil plagiarism checkers, not citing statements appropriately, etc.), it will be treated as academic dishonesty. Turnitin will be used regularly in this course.

If you are unsure whether your writing is sufficiently your own work, I am happy to talk to you “off the record” as long as it is before you have submitted your writing.

Mobile devices in class

This course will be active and you will often be working on class activities on your laptop. Use of your laptop or phone for activities other than the one we are working on together is discouraged. Please maximize your focus during our time together by turning off notifications and closing unnecessary apps and browser tabs. I will occasionally ask for all devices to be away or only open to approved sites (Canvas during paper quizzes, for instance). Seeing a device on a different app or site will be evidence of academic dishonesty and result in a zero score for that activity. If you have a need for a particular app during a “closed” activity (such as a disability services app) we will work with you, but please let me know beforehand.