

BIOSC_1831 Biochemistry Writing Practicum Course Syllabus Spring 2019

INSTRUCTOR: Dr. Xiaodong Zhu
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Office Hours: Please e-mail to arrange a suitable time to meet

Course material: No textbooks or handouts. Several useful books are available on reserve in Langley Library: Writing Papers in the Biological Sciences by Victoria E. McMillan; Writing in the Biological Sciences by Angelika H. Hofmann; Scientific Style and Format; and Writing in the Life Sciences by Laurence Greene

Communications: There are NO formal meetings for this course. CourseWeb and email will be used for communication.

Course Content/Description:

The objective of this writing course associated with Biochemistry Laboratory (1830) is to introduce students to the practice of scientific communication. The primary focus is on the most current research literature in the field on the topic of CFTR (Cystic fibrosis transmembrane conductance regulator), and gene therapy of cystic fibrosis using CRISPR technology. Each student will write a mini-review article (about 10 pages, double-spaced, 1" margins, 12-point font) which summarizes recent advances in the field. In your paper, you will be expected to include significant background about the biological question being investigated, the current state of knowledge about the topic, a discussion of critical experiments leading to our understanding, and your suggestions for future work.

The course will be divided into several stages, during which students will write regularly and progressively. **First**, students will conduct research on the published literature, concentrating on the most recent publications in the major scientific journals. A review article should gather and communicate an interpretation about the topic of interest. Developing a list of good papers for your review is a very important part of the process. During this research, students are encouraged to grow their personal interests in the field and to decide what aspect their review will concentrate on. Students will come up with a list of literature that will form the basis of their review, which will be turned in **January 25th** for the instructor to review. Advice will then be given on the selection of the papers, if needed. You can find papers directly through PubMed at <http://www.ncbi.nlm.nih.gov/sites/entrez> if you access the web through the Pitt server. When using an ISP other than Pitt, use <https://sremote.pitt.edu>. You will need to enter your Pitt user name and password. Once logged on, you should select Health Sciences Library System. You will need to select Journals and Articles from the top menu or PubMed

Articles from the top tab. From here, you can find all the journals that you will need. **The second stage** will be a written title, an outline and revised reference list which should be turned in **February 10th**. It will take the instructor a week to ten days to give you feedback. Meanwhile, students should prepare or start to write the next part of the review, which will be about the background and introduction. **The third stage** of the course will be a summary of the discovery, mechanism and significance of the protein and CRISPR technology, which should be turned in **February 24th**. **The fourth stage** will add the second part of the review, emphasizing the utility of the technology to cure cystic fibrosis but with some perspective about shortcomings and possible complications. The title and the abstract will be revised based on the rough draft of the whole paper. This part, including the revised title, abstract and the rough draft is due **March 14th**. The instructor will give feedback in a week or 10 days. **The fifth stage** is to complete and refine the draft of the whole mini-review, which is due **March 31st** for peer review and final feedback. Peer-review will be done on the second draft and is due **April 10th**. **The final** draft of the mini-review is due at the end of the term on **April 20th**.

Deadlines for writing assignments:

Date (midnight)	Assignment
January 25	Annotated reference list
February 9	Title, outline & revised reference list
February 22	First draft of the first half paper
March 16	First draft of the second half paper
March 30	Abstract & the whole paper (abstract, main body & references)
April 10	Turn in the revised mini-review for peer review
April 15	Finish the peer review
April 20	Final paper

Please submit your documents as **Word files** on CourseWeb.

Grading:

<i>Annotated reference list:</i>	10 %
<i>Title and outline:</i>	15 %
<i>First half draft:</i>	15 %
<i>Second half draft:</i>	15 %
<i>Second half draft:</i>	15 %
<i>Peer review:</i>	10 %
<i>Final paper:</i>	20 %

Grading Scale:

Final letter grades are determined on a straight scale as follows:

A range: >90%; B range: 80 to 89%; BC range: 70-79%; D range: 60-69%. F grade if fewer than 60% of the points have been earned. I reserve the right to adjust the grading scales toward the end of the term.

Late assignments due to emergency situations that are outside of your control (illness, or death in the immediate family) will be considered on an individual basis. You must email me BEFORE the assignment is due & supply the documentation later. I will issue extensions for such situations. Late assignments without proper reasons will be docked 10% of the points per day.

Academic Integrity Policy: Cheating or plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity (<http://www.as.pitt.edu/faculty/policy/integrity.html>) will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the homework, exam, or presentation will be imposed.

Turnitin: Students agree that by taking this course, all required assignments may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy and Privacy Pledge posted on the Turnitin.com site.

Disability Resources: If you have a disability for which you are, or may be, requesting an accommodation, you are encouraged to contact both the instructor for this course and the Office of Disability Resources and Services, 140 William Pitt Union, 412-648-7890 (phone)/412-624-3346 (fax), as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course.