

BIOSC1570/1571 Microbiology Seminar

Course Syllabus
Spring 2015 (Term 2154)
A202 Langley Hall
Tuesdays 2:00 - 3:50 P.M.

INSTRUCTOR: Dr. Valerie Oke, A230 Langley Hall, 412-624-4635, voke@pitt.edu

Office Hours: Please phone or e-mail to arrange a suitable time to meet.

	Date	Presenters	Class
	Jan. 6		Organization
1	Jan. 13	2 students	Introductory presentations
2	Jan. 20	2 students	Introductory presentations
3	Jan. 27	2 students	Introductory presentations
4	Feb. 3	2 students	Introductory presentations
5	Feb. 10	2 students	Introductory presentations
6	Feb. 17	2 students	Introductory presentations
7	Feb. 24	2 students	Full paper presentations
8	Mar. 3	2 students	Full paper presentations
	<i>Mar. 10</i>	<i>Spring Break</i>	
9	Mar. 17	2 students	Full paper presentations
10	Mar. 24	2 students	Full paper presentations
11	Mar. 31	2 students	Full paper presentations
12	Apr. 7	1 student/peer review BIOSC 1571	Full paper presentations
13	Apr. 14	1 student	Full paper presentations

Dates of writing assignments if you are enrolled in BIOSC 1571:

Date	Assignment
Jan. 20	Summary of Jan. 13 paper
Feb. 3	Summary of Jan. 27 paper
Feb. 10	Paper topic and reference list
Feb. 17	Summary of Feb. 10 paper
Mar. 2 (Monday)	First draft (partial)
Mar. 30 (Monday)	Second draft (full)
Apr. 6 (Monday)	Peer review
Apr. 20 (Monday)	Final paper

Course Content/Description:

This course focuses on primary research literature in the field of microbiology, with an emphasis on effective techniques for communicating about the associated science. The course will be divided in two: the first half consists of faculty-led discussions of pre-assigned papers and the second half will be student-led oral presentations of student-chosen papers. We will focus on 2-3 major topics over the semester. The faculty-led classes are intended to be a discussion about all aspects of the paper and students are expected to participate fully. For the second half of the course, individual students will orally present a research paper during class. As with the first half of the course, all students are expected have read the paper and to participate fully.

During the semester, each student will be required to prepare **two** PowerPoint-type oral presentations to the class. The Introductory presentation will be a short, 15 minute presentation on the assigned paper. Two students will do presentations on the same paper with one student focusing on relevant background information and the other student focusing on relevant techniques. Each presenter will also present one figure from the paper. The other figures will be discussed as a group where any student may be asked to present a figure. The Full paper presentation will entail leading the discussion of a research article of your choosing (with some guidance from the instructor) to the class. You will be expected to read other primary literature and relevant review articles in addition to the paper being presented. All papers for class discussion will be available on the CourseWeb site for this course. To download and search for other relevant papers you should use the PubMed site. If you are accessing through the Pitt server, then you can find papers directly through PubMed at <http://www.ncbi.nlm.nih.gov/sites/entrez>. When using an ISP other than Pitt, use the following web site: <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.

Guidelines for selecting a paper: Papers should be current (within the last year or two) and related to the topics that we have chosen for the course. It is recommended that you utilize the following journals as a source of papers: *Molecular Microbiology*, *Journal of Bacteriology*, *Journal of Virology*, *Genes and Development*, *Science*, *Nature*, *PLoS*, or *PNAS*.

Before your Full paper presentation, you must:

- Select a paper at least two week prior to your presentation so that I can approve it and post it on Courseweb, and your classmates can have adequate time to read it.
- Meet with me to go over your presentation *no later than the **FRIDAY*** before your presentation.

On the day of your presentation: You will give a PowerPoint-type oral presentation of your chosen paper. You should plan for this to last about 30 minutes without interruptions. During the presentation, the non-presenting students will be expected to ask questions and participate in discussions that might occur during the course of the presentation. There will be two paper presentations per class.

Class participation: During the first half of the course you will be expected to participate in the discussion of the papers. This will include describing the hypotheses being tested, techniques used, results, figures and tables, and conclusions drawn from these results. It is expected that you will not be familiar with all the techniques and background information presented in the papers. Therefore, you are expected to ask relevant questions when you have them. During student presentations in the second half of the course, you will be expected to prepare three questions about each paper ahead of time, which will be turned in, and ask one or more relevant questions of the speaker.

Grading: Grades will be determined in roughly the following manner:

<i>Oral Presentations:</i>	40 points (10 points short presentation, 30 points full presentation)
<i>Written questions:</i>	12 points
<i>Participation:</i>	48 points (4 points/class)

Important: You are responsible for reading the papers **every week**. You are expected to participate in class discussion of the paper and the presentation.

Missed class: If you need to miss class for reasons outside of your control, relevant documentation must be provided. For the first half of the course, you will be required to meet with me to discuss 1-2 figures from the paper that you missed. For the second half of the course, you will be required to turn in a written summary of the papers being presented on the day that you were absent. The work must be made up within one week of missing class. If a conflict arises with the date of your presentations, it will be your responsibility to make arrangements with your classmates to switch the date of your presentation. Please inform me if you switch presentation dates with a classmate.

Withdrawal: The deadline for Monitored Withdrawal is March 6.

If you are taking the "W" option (BIOSC1571): For three of the "faculty-led" discussions (those on *Jan. 13, Jan. 27, and Feb. 10*), students taking the "W" option will submit a short (1-2 page, 12 point, double spaced) written summary and critique of the paper. This will consist of a short background, the hypothesis/question being investigated, the methods used, the results/conclusions, and any "problem" you found with the paper. This is NOT to be a figure-by-figure review of the paper. The summary should be e-mailed to me as a Word document prior to the start of the next class. In other words, you will write the summary after we have discussed the paper in class.

You will also be required to write a literature research paper (8-10 pages, double-spaced, 1" margins, 12 point font) centering on a more specific subtopic from the topics covered in class. You will be expected to include in your paper 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. A one page proposal for the specific topic of your paper plus an initial reference list is due on **Tuesday, February 10**. Your first draft should include a complete draft of your introduction (1-2 pages) and the first 2-4 pages of the body of your paper and is due on **Monday, March 2**. A complete second draft is due **Monday, March 30**. Peer review will be done on the second draft; the written peer review will be due **Monday, April 6** with in person discussion in class on April 7. Individual conferences will be set up after each draft. Your final paper is due **Monday, April 20**. Please submit your documents as Word files by e-mail.

Grading of “W” option:

<i>Summaries:</i>	15 points (5 points each)
<i>Proposal/ref list:</i>	5 points
<i>First draft:</i>	10 points
<i>Second draft:</i>	15 points
<i>Peer review:</i>	10 points
<i>Final paper:</i>	45 points

At least 70 points are required for a C in the course.

Late assignments will be docked points (10% per day) unless excused for a documented reason that is outside of your control.

Academic Integrity Policy: Cheating/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 Turnitin.com page 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. Disability Resources.