

# BIOSC 1570/1571 Microbiology Seminar with Writing

Spring 2022 (Term 2224)  
Seminar Tuesdays 1-2:50 pm in A202 Langley  
Writing practicum Tuesdays 3-3:50 pm in A202 Langley

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

Office hours are by appointment. I am always willing to meet with students individually.

**Course Description:** The seminar portion of this course (BIOSC 1570) focuses on reading and analyzing primary research literature in the field of microbiology, with an emphasis on effective techniques for communicating about the associated science. We will choose 2-3 major topics to focus on over the semester. We will discuss the journal articles in two different ways. On some weeks you will design “slides” on white boards in class, and then we’ll discuss the article as a group. On other weeks 2-3 students will be in charge of presenting the background and first figures, and then we’ll finish the articles on the white boards. A random student from each board group will be selected to present the assigned figure. You are expected to read each article carefully before class and participate fully in the discussion. In the second part of the course, you will each pick a journal article to present to the class in 15 minutes using Assertion-Evidence slides. Articles for your talk should be current or seminal primary literature and related to the topics that we have chosen for the course.

**Class participation:** During the first part of the course you will be expected to participate in the discussion of the journal articles. This will include describing the hypotheses being tested, techniques used, results, figures and tables, and conclusions drawn from these results. You may 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 part of the course, you will be expected to ask one or more relevant questions of the speakers each day.

**Guidelines for selecting a paper:** Papers should be current (within the last year or two) or seminal primary literature and related to the topics that we have chosen for the course. It is recommended that you utilize the following journals as sources of papers: *Molecular Microbiology*, *Journal of Bacteriology*, *Journal of Virology*, *Genes and Development*, *Science*, *Nature*, *PLoS*, or *PNAS*. Your article must be approved by me. To download and search for papers you should either use the journal website or PubMed. If you are accessing through the Pitt server, then you can find papers directly. When off campus, you’ll sometimes need to log into the library system before accessing articles so that you can get them for free. Do NOT pay for articles!

**Writing credit:** If you are enrolled in the writing section of this course (BIOSC 1571), you will have some smaller writing assignments, and then you will write and revise a literature review paper (7-9 pages, 1.5 spacing, 1” margins, 12-point font) centering on the primary literature article that you are doing for your presentation. You will put it into context by using at least two more primary literature articles. 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.

- You will choose one substantial primary literature article that interests you that you will cover in detail.
- You will choose at least two more primary literature articles that help explain your focus article.
  - One article must have been published before your focus article.
  - The other article may have been published at any time.
  - You will cover in detail at least one experiment in each of these articles.
- You may use additional primary literature articles in brief and review articles to help with your introduction and conclusions.

**Grading:**

*Grades for the seminar portion of the course (BIOSC 1570) will be determined in the following manner:*

Prepared group presentation:	10 points
Random draw presentation:	10 points
Solo paper presentation:	40 points
Participation:	40 points (3 points/class)
	100 points total

At a minimum 90% and above will be an A- or better, 80% and above will be a B- or better, and 70% and above will be a C or better.

*Grades for the writing portion of the course (BIOSC 1571) will be determined in the following manner:*

Difficulty paper	5 points
Expt. paragraphs (three):	15 points
Topic/ref list:	5 points
Introduction	5 points
First draft:	10 points
Second draft:	20 points
Peer review:	10 points
Conclusions	5 points
Final paper:	25 points
	100 points total

At a minimum 90% and above will be an A- or better, 80% and above will be a B- or better, and 70% and above will be a C or better.

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

**Missed class:** If you need to miss class for reasons outside of your control, relevant documentation must be provided. You will be required to turn in a written summary of the journal article for that week. If you miss giving any of your presentations, you will need to be rescheduled. In the case of missing final talks, you will be required to read one of the papers and write a summary. The work must be made up within one week of missing class unless other arrangements are agreed upon.

**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.

Violation of the Academic Integrity Code requires the instructor to submit an Academic Integrity Violation Report to the Dean's Office.

Any attempt to submit work that is not the student's own work is a violation of academic integrity. If I find that a writing assignment contains evidence of plagiarism, the level of severity will determine whether the sanction is an F in the course, a 0 score on the assignment, or partial credit on the assignment. **A second academic integrity offense in the course will result in an automatic grade of F.**

**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.

**E-mail:** Although e-mail will not be used routinely in this class for communication, occasionally I may send out an e-mail notice using Canvas. Emails sent in Canvas only go to your Canvas Inbox unless you allow Notifications so that you get them by regular email. Information on configuring your Notifications in Canvas is at <https://community.canvaslms.com/t5/Student-Guide/How-do-I-set-my-Canvas-notification-preferences-as-a-student/ta-p/434>. Any general emails are also posted as Announcements on Canvas.

Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address.

**Disability Resources:** If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Resources and Services, 140 William Pitt Union, 412-648-7890/412-624-3346 (Fax), as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course. For more information, visit [www.studentaffairs.pitt.edu/drsabout](http://www.studentaffairs.pitt.edu/drsabout).

**COVID-19:** This course will meet synchronously on Zoom for the first three weeks. Starting January 26, classes are anticipated to be held fully in person. Requests for remote attendance will not be reviewed by myself or the department. If you believe you have a qualifying disability that prevents you from attending in-person instruction this semester, please contact Disability Resources and Services. If you are quarantined due to COVID-19, you may temporarily participate remotely.

During this pandemic, it is important that you abide by the [public health regulations](#), the University of Pittsburgh's [health standards and guidelines](#), and [Pitt's Health Rules](#). These rules have been developed to protect the health and safety of all of us. Universal [face covering](#) is required in all classrooms and in every building on campus, without exceptions, regardless of vaccination status. This means you must wear a face covering that properly covers your nose and mouth when you are in the classroom. If you do not comply, you will be asked to leave class. It is your responsibility have the required face covering when entering a university building or classroom. For the most up-to-date information and guidance, please visit [coronavirus.pitt.edu](https://coronavirus.pitt.edu) and check your Pitt email for updates before each class.

If you are required to isolate or quarantine, become sick, or are unable to come to class, contact me as soon as possible.

Given the uncertainties of the pandemic, changes to this syllabus and schedule might be made if circumstances alter. Any changes to modes of instruction or course adjustments will be announced on Canvas.

**BIOSC 1570/1571 course schedule:**

Date	Seminar	Writing Practicum	What is Due?
Class 1 Jan. 11	<ul style="list-style-type: none"> <li>Pick topics for course</li> <li>Reading primary literature</li> <li>Assertion-evidence slides</li> </ul>	<ul style="list-style-type: none"> <li>Finding journal articles using PubMed; using reference managers; topic development</li> </ul>	<ul style="list-style-type: none"> <li>Think of some topics in microbiology that you would like to learn more about</li> </ul>
Class 2 Jan. 18	<ul style="list-style-type: none"> <li>Journal article 1 (class produces assertion-evidence slides on white boards)</li> <li>Giving effective oral presentations</li> </ul>	<ul style="list-style-type: none"> <li>Avoiding plagiarism</li> </ul>	<ul style="list-style-type: none"> <li>Read journal article 1</li> <li>Write difficulty paper (W students only)</li> </ul>
Class 3 Jan. 25	<ul style="list-style-type: none"> <li>Journal article 2 (class produces assertion-evidence slides on white boards)</li> </ul>	<ul style="list-style-type: none"> <li>Peer review; paragraph structure (Issue and Point)</li> </ul>	<ul style="list-style-type: none"> <li>Read journal article 2</li> <li>Write experiment paragraph for journal article 1 (W students only)</li> </ul>
Class 4 Feb. 1	<ul style="list-style-type: none"> <li>Journal article 3 (Group A presents first figures followed by class producing white board figures)</li> </ul>	<ul style="list-style-type: none"> <li>Peer review; where to place citations</li> </ul>	<ul style="list-style-type: none"> <li>Read journal article 3</li> <li>Group A prepares presentation</li> <li>Write experiment paragraph for journal article 2 (W students only)</li> </ul>
Class 5 Feb. 8	<ul style="list-style-type: none"> <li>Journal article 4 (Group B presents first figures followed by class producing white board figures)</li> </ul>	<ul style="list-style-type: none"> <li>Elevator pitches for topics</li> </ul>	<ul style="list-style-type: none"> <li>Read journal article 4</li> <li>Group B prepares presentation</li> <li>Write topic proposal with reference list (W students only)</li> </ul>
Class 6 Feb. 15	<ul style="list-style-type: none"> <li>Journal article 5 (Group C presents first figures followed by class producing white board figures)</li> </ul>	<ul style="list-style-type: none"> <li>Moves of an introduction</li> </ul>	<ul style="list-style-type: none"> <li>Read journal article 5</li> <li>Group C prepares presentation</li> <li>Write experiment paragraph for journal article 4 (W students only)</li> </ul>
Class 7 Feb. 22	<ul style="list-style-type: none"> <li>Journal article 6 (Group D presents first figures followed by class producing white board figures)</li> </ul>	<ul style="list-style-type: none"> <li>Peer review; writing figure legends</li> </ul>	<ul style="list-style-type: none"> <li>Read journal article 6</li> <li>Group D prepares presentation</li> <li>Write introduction</li> </ul>
Class 8 Feb. 28	<ul style="list-style-type: none"> <li>Journal article 7 (Group E presents first figures followed by class producing white board figures)</li> </ul>	<ul style="list-style-type: none"> <li>Paper workshop</li> </ul>	<ul style="list-style-type: none"> <li>Read journal article 7</li> <li>Group E prepares presentation</li> </ul>
<b>Mar. 2 Wednesday</b>			<ul style="list-style-type: none"> <li>Write first draft (partial) (W students only)</li> </ul>
<i>Spring Break</i>			
Class 9 Mar. 15	<ul style="list-style-type: none"> <li>Journal article 8 (Group F presents first figures followed by class producing white board figures)</li> </ul>	<ul style="list-style-type: none"> <li>Writing workshop (citations; transitions; synthesis)</li> </ul>	<ul style="list-style-type: none"> <li>Read journal article 8</li> <li>Group F prepares presentation</li> </ul>

Class 10 Mar. 22	<ul style="list-style-type: none"> <li>• Practice talks</li> </ul>	<ul style="list-style-type: none"> <li>• Paper workshop</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare 15-minute talk on your paper</li> </ul>
<b>Mar. 23</b> <b>Wednesday</b>			<ul style="list-style-type: none"> <li>• Write second draft (full) (W students only)</li> </ul>
Class 11 Mar. 29	<ul style="list-style-type: none"> <li>• Final talks</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss peer reviews in groups</li> </ul>	<ul style="list-style-type: none"> <li>• Revise talk if presenting</li> <li>• Peer review two papers (W students only)</li> </ul>
Class 12 Apr. 5	<ul style="list-style-type: none"> <li>• Final talks</li> </ul>	<ul style="list-style-type: none"> <li>• Moves of conclusions</li> </ul>	<ul style="list-style-type: none"> <li>• Revise talk if presenting</li> </ul>
Class 13 Apr. 12	<ul style="list-style-type: none"> <li>• Final talks</li> </ul>	<ul style="list-style-type: none"> <li>• Peer review</li> </ul>	<ul style="list-style-type: none"> <li>• Revise talk if presenting</li> <li>• Revise conclusions (W students only)</li> </ul>
Class 14 Apr. 19	<ul style="list-style-type: none"> <li>• Final talks</li> </ul>	<ul style="list-style-type: none"> <li>• Choosing titles</li> </ul>	<ul style="list-style-type: none"> <li>• Revise talk if presenting</li> </ul>
<b>April 27</b> <b>Wednesday</b>			<ul style="list-style-type: none"> <li>• Revise paper to produce final version (W students only)</li> </ul>