



Course Syllabus
Environmental and Occupational Health Sciences
JOURNAL CLUB (EOH 2109)
Department of Environmental and Occupational Health
Fall 2023
Thursday, 11:00-11:55 AM, A215 Public Health-Crabtree

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Description:

Journal Club is intended for graduate students to become familiar with primary scientific literature by learning to select, read, analyze, understand, and summarize original research papers. Graduate students will also hone their scientific and critical writing skills. Meetings will be held weekly during the regular academic semester during which one student will present the research article and lead in the discussion. All students will prepare for each discussion in advance and will contribute to the analysis and discussion of the paper. In journal club, papers will be presented on a diverse set of topics related to our fields of research performed at the University of Pittsburgh School of Public Health.

Rationale:

The purpose of this course is to provide an environment in which to hone your oral presentation, scientific writing and critical evaluation skills. Choosing literature and constructing a presentation are important parts of this educational program. A theme for each presentation is selected based upon the primary mentor's expertise and student interest.

Objectives:

1. Students will learn how to select, read, analyze, understand, and orally summarize a recent impactful scientific paper in the subject areas of interest.
2. Place scientific literature in context and research necessary background information.
3. Students will learn strategies for making effective oral and virtual presentations using slides and graphics and demonstrate creativity for engaging audience participation and discussion.
4. Participate in a scientific discussion.
5. Students will learn to develop their scientific writing skills through critically evaluating the presented literature and presentation.

Teaching Philosophy:

This course emphasizes active participation, critical thinking, and continued learning. Because we all have different expertise, all questions and viewpoints are encouraged and respected in the classroom. Everybody should participate and you will need critical thinking skills to be successful in your career in science.

Class Structure:

- All classes will start on time (11:00am) and students must be on time to receive credit.
- A student will present a research article. 40-45 minutes with 10 minutes for questions by the instructor, faculty, and students throughout the presentation.
- If not presenting all students are expected to read the manuscript prior to class and everyone must participate in discussion of the manuscript.

Responsibilities and Expectations of Students:

For the student presenters:

- Provide an oral summary of one paper of their choice for the semester.
- Discuss the selection of a paper with their mentor and email your selected paper to Dr. Fitz for approval by 9/28/2023.
 - Papers should be original data driven manuscript (Review papers will not be presented).
 - No more than 4 years old.
 - From high impact journal: Nature, Science and Cell, PNAS, JCI; as well as the most respected journals in your topic of interest. Look at the Impact factor or h-index.
 - Contain enough figures and data to drive a 45 minute presentation.
 - Be of interest to a broad audience to generate discussion.
- Develop a 45 minute oral presentation of the manuscript selected.
 - Study background should provide the audience with the necessary information and context for a thoughtful and critical evaluation of the articles significance.
 - Highlight other literature and research that lead to the current manuscript.
 - Review papers cited in the manuscripts Introduction section as well as previous literature by the research group
 - Describe the rationale, hypothesis and specific aims of the study.
 - The significance for public health.
 - Study Methodology should provide a clear explanation of the experimental groups, unique complex methods that are critical to the manuscript, and statistical methods utilized.
 - Discuss limitations with the techniques chosen
 - Never assume the audience understands a technique. While you do not need to present all the methodology you need to be able to answer questions if asked by the audience so you should be familiar with all techniques.
 - Thoroughly present the relevant data that supports the hypothesis.
 - You do not need to present every experiment.
 - You need to know how to identify the major experiments of the paper and eliminate any redundant or irrelevant experiments.
 - Verbally and visually highlight the key results and expand on their significance.
 - Present the authors conclusions and your perspective of the study.
 - Include explanation of inconsistencies with previous literature or unexpected results.
 - Consider if the data presented support the conclusions drawn by the authors.
 - Highlight limitations of the manuscript.
 - Discuss the relevance of the manuscript to your own research interest.
- Schedule a meeting with Dr. Fitz at least the Tuesday before your presentation to informally review your presentation. This could be in person, through email or a zoom meeting. For this meeting you should have a finalized version of your presentation to discuss.
- Be able to critically think about questions asked by the audience and provide thoughtful answers.
- Facilitate discussion including criticisms of the methodology, results and conclusions.
- Encourage attendance by your mentor, dissertation committee and research team.

For all students:

- All students are required to be on time and attend every presentation session.
 - Students that have previously discussed excused absences will do a writing project related to that week's discussion topic.
 - Unexcused absences will not be tolerated.
- All students are required to read the manuscript prior to the presentation.

- All students are required to bring a copy of the paper and have thoughtful questions ready to facilitate discussion of the research.
 - Questions can be about methodology, interpretation of the results, inconsistency with previous literature, relevance of conclusions, etc.
 - No questions is a stupid question.
 - Journal club is expected to be interactive.
 - If students do not participate in the discussion of the manuscript you will be asked to perform a written project which will be due the Tuesday after the presentation.
- All students are required to thoughtfully complete a career development plan with discuss of their primary mentor. Plans should be emailed to Dr. Fitz for review by 10/26/2023

Evaluation:

This class is credit or no credit and you will receive credit once you complete the following:

Complete career development plan (10 points)

Participation in discussion of the presentation (40 points)

Present a 40-45 min scientific presentation of a high impact manuscript (50 points)

Academic Integrity:

Academic Integrity Statement for Pitt Public Health Course Syllabi
(Approved by EPCC on 7/31/18)

All students are expected to adhere to the school's standards of academic honesty. Cheating/plagiarism will not be tolerated. The Graduate School of Public Health's policy on academic integrity, which is based on the University policy, is available online in the Pitt Public Health Academic Handbook <https://www.publichealth.pitt.edu/academic-handbook>. The policy includes obligations for faculty and students, procedures for adjudicating violations, and other critical information. Please take the time to read this policy.

Plagiarism:

University of Pittsburgh policy: "Integrity of the academic process requires that credit be given where credit is due. Accordingly, it is unethical to present as one's own work the ideas, representations, words of another, or to permit another to present one's own work without customary and proper acknowledgement of sources.

A student has an obligation to exhibit honesty and to respect the ethical standards of the profession in carrying out his or her academic assignments. Without limiting the application of this principle, a student may be found to have violated this obligation if he or she:*

Presents as one's own, for academic evaluation, the ideas, representations, or words of another person or persons without customary and proper acknowledgment of sources.

Submits the work of another person in a manner which represents the work to be one's own."

Source: <http://www.bc.pitt.edu/policies/policy/02/02-03-02.html>

Therefore, you must clearly indicate which thoughts are yours and which thoughts belong to others by citing your sources. If you are uncertain, please contact the instructor. Plagiarism detection software will be used in this course. If plagiarism is detected, you will automatically receive a grade of zero for that assignment.

Disabilities:

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services, 140 William Pitt Union, 412-648-7890 or 412-383-7355 (TTY) as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for specific courses.

Diversity Statement:

The University of Pittsburgh Graduate School of Public Health considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. Pitt Public Health is committed to creating and fostering inclusive learning environments that value human dignity and equity. Every member of our community

is expected to be respectful of the individual perspectives, experiences, behaviors, worldviews, and backgrounds of others. While intellectual disagreement may be constructive, no derogatory statements, or demeaning or discriminatory behavior will be permitted. If you feel uncomfortable or would like to discuss a situation, please contact any of the following: • the course director or course instructor; • the Pitt Public Health Associate Dean for responsible for diversity and inclusion; • the University's Office of Diversity and Inclusion at 412-648-7860 or <https://www.diversity.pitt.edu/civil-rights-title-ix-compliance/make-report/report-form> (anonymous reporting form)

Health and Safety Statement:

During this pandemic, it is extremely 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. The University's requirements for face coverings will at a minimum be consistent with [CDC guidance](#) and masks are required indoors (campus buildings and shuttles) on campuses in which COVID-19 Community Levels are High. This means that when COVID-19 Community Levels are High, 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 to have the required face covering when entering a university building or classroom. Masks are optional indoors for campuses in which county levels are Medium or Low. Be aware of your [Community Level](#) as it changes each Thursday. [Read answers to frequently asked questions regarding face coverings](#). For the most up-to-date information and guidance, please visit the [Power of Pitt site](#) 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 to discuss arrangements.

Sexual Misconduct, Required Reporting, and Title IX:

The University is committed to combatting sexual misconduct. As a result, you should know that University faculty and staff members are required to report any instances of sexual misconduct, including harassment and sexual violence, to the University's Title IX office so that the victim may be provided appropriate resources and support options. What this means is that as your professor, I am required to report any incidents of sexual misconduct that are directly reported to me, or of which I am somehow made aware. There are two important exceptions to this requirement about which you should be aware: A list of the designated University employees who, as counselors and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: <https://www.diversity.pitt.edu/civil-rights-title-ix-compliance/make-report/confidentiality-andretaliation>

An important exception to the reporting requirement exists for academic work. Disclosures about sexual misconduct that are shared as part of an academic project, classroom discussion, or course assignment, are not required to be disclosed to the University's Title IX office. If you are the victim of sexual misconduct, Pitt encourages you to reach out to these resources: • Title IX Office: 412-648-7860 • SHARE @ the University Counseling Center: 412-648-7930 (8:30 A.M. TO 5 P.M. M-F) and 412-648-7856 (AFTER BUSINESS HOURS) If you have a safety concern, please contact the University of Pittsburgh Police, 412-624-2121. Other reporting information is available here: <https://www.diversity.pitt.edu/civil-rights-title-ixcompliance/make-report>

Class Schedule:

The below website will have updates of the schedule and articles for discussion.

<https://www.publichealth.pitt.edu/environmental-and-occupational-health/seminars-events/journal-club>