

Instructor	William (Bill) Daniell, MD MPH Associate Professor; Environmental and Occupational Health Sciences Meetings by appointment	Office: Health Sciences, F-561E Email: bdaniell@uw.edu Phone: 206-685-3160
Class sessions	M 3:00-4:20 pm	
Class location	HSB T-531	
Web site	UW Canvas: <a href="https://canvas.uw.edu/courses/989088">https://canvas.uw.edu/courses/989088</a>	

### **Course description**

This course focuses on critical reading of selected basic and applied research publications on environmental and occupational health problems. The course promotes critical thinking about both the content of scientific readings and the larger context in which those readings exist. The readings reflect a variety of study designs, as well as a broad sample of environmental hazards and settings, including domestic and global situations.

**Pre-requisites:** Graduate students majoring in Environmental and Occupational Health Sciences.

**Credits:** 1, graded as credit/no credit.

### **Learning objectives**

At the end of this course, the student should be able to:

1. Read and interpret scientific journal articles related to a variety of environmental health topics.
2. Identify and discuss strengths and shortcomings of published studies, and discuss what they contribute to the field.
3. Discuss the relevance of scientific articles in their broader scientific and social contexts.

### **Course organization and assignments**

All students in the class will prepare for each class session by reading 1-2 assigned scientific articles plus background material provided by the instructor. Each student will read all (both) assigned articles each week but will only be expected to critically review one article.

Each student will be responsible – as part of a group of 2-3 students – for **leading one class session**. The group will provide one or more thought-provoking questions or statements for other students to ponder *before* the class session (no written assignment for the non-group students). The group will verbally summarize and critique the assigned articles in class, including any prominent strengths, shortcomings or contributions of the articles. With instructor assistance, the group will engage the class in discussion about the articles, and the broader scientific or social contexts.

### **Reading materials**

Assigned articles (1-2) and background material for each case will be posted on the course Canvas site. The site will also include resources explaining critique of scientific articles, and plain-language communication.

### **Schedule of weekly topics**

- Week 1: Risk perception and risk communication – Kristin Pace, PhD (guest speaker): Social Research Scientist, Local Hazardous Waste Management Program; Public Health – Seattle & King County.
- Week 2: Sustainability, human development, and equity – Bill Daniell (instructor) will lead the session.  
All other sessions will be lead by a student group.
- Week 3: New EPA ozone standard.
- Week 4: Climate change and heat-related health effects.
- Week 5: Water, sanitation and cholera in Haiti.

- Week 6: Childhood lead poisoning.
- Week 7: Arsenic in Washington state wines.
- Week 8: Concentrated animal feeding operations.
- Week 9: Nanoparticles and worker health.
- Week 10: Natural environment and health.

**Grading – credit/no credit**

Course grades are determined on the basis of: preparation and participation (attentive listening, response to questions or prompts, self-initiated questions or comments, quick write assignments); and group presentation in one class session.

**Academic integrity**

Students at the University of Washington are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. The UW School of Public Health (SPH) is committed to upholding standards of academic integrity consistent with the academic and professional communities of which it is a part. Plagiarism, cheating, and other misconduct are serious violations of the University of Washington Student Conduct Code (WAC 478-120). We expect you to know and follow the university's policies on cheating and plagiarism, and the SPH Academic Integrity Policy. Any suspected cases of academic misconduct will be handled according to University of Washington regulations. For more information, see the University of Washington Community Standards and Student Conduct website.

**Access and accommodations**

Your experience in this class is important to me (Bill Daniell). If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations, you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or disability.uw.edu. Qualifying conditions include but not limited to mental health, attention-related, learning, vision, hearing, physical or health impacts. DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.