

**ENV H 572: Environmental Risk and Society (3 credits)**  
**Autumn 2019**

**Instructors:**

**Marissa Baker, PhD, Assistant Professor (bakermg@uw.edu)**  
**(she/her/hers)**

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\*As graduate students, you should direct your questions to Dr. Baker as she will be grading all your work. This allows the TA to largely focus on the undergraduates.

**Ryan Babadi, PhD(c), Teaching Assistant (rbabadi@uw.edu)**  
**(he/him/his)**

Department of Environmental & Occupational Health Sciences

**Class:** Monday and Wednesday, 10:00-11:20 AM, South Campus Center (SOCC) 301

*The University of Washington acknowledges that the land we gather on to learn, teach, and grow is the native land of the Coast Salish people, the land which touches the shared waters of all tribes and bands within the Suquamish, Tulalip, and Muckleshoot nations.*

**Office Hours: Monday 12pm-1pm, Rotunda (and also by appointment)**

**Overview**

This course examines the development and uses of environmental risk analysis, particularly in regard to public health concerns. Environmental risk analysis is practiced within a context of social and cultural values, leading to differing perceptions, ranking of risks, and challenges in effective risk communication. Students will learn about the technical components of the risk assessment framework, discuss various strategies for risk communication and risk management, and apply what they have learned to a variety of case studies for environmental health risk, including consumer products, methylene chloride, lead, glyphosate, and others. Students will frequently be asked to work with their fellow students, including discussions and exercises in class, and to produce a poster explaining an environmental health risk scenario.

**Learning Objectives**

By the end of this course, students will be able to:

1. Describe the primary components of current risk assessment and risk management procedures used for environmental health hazard evaluation and resolution.
2. Explain how social and cultural values shape perceptions and communication of environmental risks.
3. Identify the key aspects of public participation processes aimed at resolving environmental risk conflicts.
4. Apply critical thinking to emerging issues in environmental risk.
5. Demonstrate “environmental literacy” through analysis of news media reports of environmental health risk issues.
6. Apply risk assessment principles to a specific environmental health risk controversy.

**Required Readings**

There will be a short required reading prior to most sessions. These will all be available on the Canvas site (under

“Modules”). Each reading will be accompanied by a low stakes HYRTT (Have You Read the Text?) quiz, which students will complete on Canvas, and must have done prior to the start of class.

### **Assignments, Examinations, Grading**

Student mastery of material will be assessed a variety of ways over the course of the quarter. The point allocations for this course are below. Please keep in mind that assignments and their point allocation are subject to change at instructor discretion throughout the quarter. There is no final exam in this course.

### **Point Allocation**

<b>Category</b>	<b>Subcategory</b>	<b>Points</b>
Out of class Homework	HW #1	25
	HW #2	25
	HW #3	25
	HW #4	25
Class participation and pre-class Exercises	In-class Poll Everywhere	30
	Pre-class HYRTT quizzes	30
	General In-class participation	10
	Risk Communication in class exercise	10
	Neighborhood mapping in class exercise	10
Quizzes	In-class Midterm	100
	End of class quiz	50
Final Project	Group Poster	25
	Individual Final Paper	50
	Group Presentation	60
<b>Total</b>		<b>475</b>

### **Homework**

In the first half of the course, you will be given 4 homework assignments to complete outside of class. You will be given one week to work on each assignment, and while you are encouraged to work in groups with your classmates, and seek help from the instructor as needed, each student must turn in their own, unique homework assignment. The topics for the assignments will be (roughly) as follows:

Homework 1: What is Risk, and how did the field of risk assessment emerge?

Homework 2: The role of Hazard Identification and Toxicology in the Risk Assessment framework

Homework 3: The role Dose-response and Exposure Assessment in the Risk Assessment framework

Homework 4: Risk Communication

It is estimated that each homework assignment should take you less than three hours to complete. You will receive feedback on your assignments through Canvas, from the instructor. Note that graduate students will typically be asked to answer additional, more challenging or applied homework questions than the undergraduates.

### **Poll Everywhere, Attendance, Class Participation**

Scientific evidence around teaching and learning has repeatedly shown that students learn best in an environment where they can practice active based learning, and the instructors are supportive of these techniques. Additionally, evidence confirms that active based learning is the most equitable way for students to learn in a classroom setting. For these reasons, our course will rely heavily on discussions, exercises, and projects with your classmates. Therefore, your attendance and participation is required during class time, and students are expected to attend all classes, and participate fully in the activities. We will not be recording lectures. Student attendance and participation will be assessed by using Poll Everywhere. Poll Everywhere is also used to assess understanding of the material so the instructor can adapt content presented in class in real-time. Poll

Everywhere will be used in 17 class sessions, and you will receive two points for each class session you attend and participate with Poll Everywhere. I will drop your Poll Everywhere score from two class sessions, as I understand that some absences are unavoidable.

A few sessions will have a more substantive in-class group project, so specific points (credit/no credit) will be assigned to these sessions. This includes our Risk Communication session and a Neighborhood Mapping in-class exercise, each worth 10 points. An additional 10 points will be awarded by the instructor for general participation—asking questions, volunteering information, actively working with your group, etc. As a graduate student, you will be encouraged to form a group with other graduate students. This will allow you to interact with the material on a higher level, and work with fellow students in a similar level as you.

If you know you will need to miss a session for a university-sanctioned event or health/family reason, please let the instructor know as far in advance as possible in writing (email). This way, we can come up with make-up activities if necessary, or help you to have access to the material you will miss. Make-up material for classes missed without either a prior approval

### **Random Call**

In this course we will utilize random call to answer questions posed by the instructor. The reason for using random call is it helps to create a more equitable classroom by ensuring that voices from all different backgrounds and life experiences are heard. The instructor WILL NOT use random call unless you have already had an opportunity to discuss a question with a partner or group. It is okay to answer “I don’t know” or “I don’t want to share” if the instructor calls on you. If you would like to be removed from the random call list, please contact the instructor.

### **HYRTT Quizzes**

Prior to most sessions, you will complete a HYRTT (Have you read the text?) quiz on Canvas. These are low-stakes quizzes that are open book and open note to help you prepare for the following class. The questions cover basic course content that you should be familiar with to get the most out of class. The readings are intentionally kept short in this class in order for you to be more likely to complete them and retain information. By completing the reading and finishing the HYRTT quiz prior to class, you will be well prepared for the new content that will be presented in class. Pre-class quizzes close at 10:00am on the day of the class to which they apply, and your two lowest HYRTT quiz scores will be dropped at the end of the quarter.

### **Midterm & Final Quiz**

This course will have a midterm, scheduled for Wednesday October 30. This midterm will be taken in class and include an individual portion and a group portion. It will be a mix of applied problems, short answer, vocabulary terms, and longer questions. It is worth 100 points. You will be given an opportunity after you get your midterm returned to reflect on the midterm and any material you may have not mastered in order to earn back some of the points you lost.

On Monday December 2, you will also take an in-class “final” quiz. This will be worth 50 points as is a way to assess your mastery of the material in the 2<sup>nd</sup> half of the course.

### **Final Project**

The second half of the course will feature a final project, which will consist of three parts:

- (1) Group Presentation—you will work in a group of approximately 4 graduate students to identify and research an environmental health risk. You will produce a presentation (or interactive session) about this risk, and present during our 12/2/19 class session with your group. All members of the group will receive the same grade for the presentation, which should last 20-25 minutes. Additional details regarding the presentation will be forthcoming.
- (2) Draft individual paper—Each group member will write an individual paper about a subtopic of risk assessment. Each group member will receive their own grade on this paper. Graduate students have the option to submit a draft of this by 11/25 to receive instructor feedback. Submitting the draft is not required.
- (3) Final Individual Paper—You will write your individual final report on the environmental health risk that you researched for your group poster. Each group member will receive their own grade. You will be asked to discuss

(dissect) advocacy literature related to the environmental health risk you choose. This could be advocacy for or against the risk and comment on why these sources may misrepresent scientific information about the risk as presented in peer-reviewed journals. This paper should also include a 250 word summary of the environmental health risk, which you can work with your group to develop (or develop on your own—this page isn't counted in the page count)

As I understand it can be challenging to find times for groups to meet, you will be given opportunities to meet and work in class with your group throughout the second half of the course. However, finding time to meet outside of class may still be necessary. You will be able to choose your own group, but should only include graduate students.

### **Late Assignment Policy**

I expect that all assignments be turned in by the deadline indicated on the course website. If an assignment is turned in late, it is subject to a 10% per day grade reduction (e.g., the score on a 3-day-late assignment will be reduced by 30%). If the assignment is late due to an unforeseen emergency, an explanation is required in writing (via email), and will be considered on a case-by-case basis. Similarly, the instructor will ensure feedback is returned promptly to students (within a week for homework and midterm).

### **Access and Accommodations:**

Your experience in this class is important to me. 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 (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or [uwdrs@uw.edu](mailto:uwdrs@uw.edu) or [disability.uw.edu](mailto:disability.uw.edu). 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(s) 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.

### **Religious Accommodations Policy**

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at [Religious Accommodations Policy](#). Accommodations must be requested within the first two weeks of this course using [the Religious Accommodations Request form](#).

### **Multi-cultural Inclusion Commitment**

The UW School of Public Health seeks to ensure all students are fully included in each course. We strive to overcome systemic racism by creating an environment that reflects community and mutual caring, while we ally with others in combating all forms of social oppression. This is a work in progress, as transformation is rarely a fully-completed project. In this course, we will look for opportunities to improve our performance as we seek to break down institutional racism. This can include course readings, class interactions, faculty performance, and/or the institutional environment. We encourage students to talk to your faculty member, the program director, and/or submit your comments in the course evaluation form.

### **Academic Integrity**

Students at the University of Washington (UW) 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](#).

**Plagiarism** (which is using someone else's work, answers, phrases or sentences and calling them your own) is often misunderstood and careful attention should be paid to avoid plagiarism in the course. Students are expected to reference all work and give appropriate attribution for all materials cited, including any reference to websites or articles. More info at: <http://depts.washington.edu/grading/conduct/index.html>. In addition, we recommend the following online tools to help you avoid plagiarism:

1. The University has a license agreement with **VeriCite**, an educational tool that helps prevent or identify plagiarism from Internet resources. **VeriCite is activated on all of your writing assignments.** As soon as you submit your assignment, you can view the originality report. The report will include a score which will indicate the amount of original text in your work and whether all material that you quoted, paraphrased, summarized, or used from another source is appropriately referenced. Please use this tool and resubmit your assignment if you are not happy with the VeriCite score. We will scrutinize scores with >20% similarity to other sources including other assignment submissions.
2. Watch "Getting Real About Plagiarism," the 7-part video by Assistant Professor of English, Leisha Stolt, at Ivy Tech Community College, available at [https://www.youtube.com/watch?v=m0GJ\\_bFrmRc](https://www.youtube.com/watch?v=m0GJ_bFrmRc)
3. Read the Purdue University Online Writing Lab website to learn more about "Avoiding plagiarism."
  - a. Overview and Contradictions: <http://owl.english.purdue.edu/owl/resource/589/1/>
  - b. Is it Plagiarism Yet?: <http://owl.english.purdue.edu/owl/resource/589/02/>
  - c. Safe Practices: <http://owl.english.purdue.edu/owl/resource/589/03/>
4. Take the "Plagiarism Self Test," by Western Carolina University: <http://www.wcu.edu/11869.asp>
5. Use the UW Writing Center and Librarians as tools for improving your writing and finding peer-reviewed resources for your written assignments.

Writing Center one-on-one tutoring: <http://depts.washington.edu/owrc/signup.php>

Librarian appointment scheduler: <http://lib.washington.libcal.com/booking/owrc>

In addition, for English as a Second Language students, the UW Bothell Writing Center has created an online resource for writing (ESL Student Handbook), with a special section addressing Academic Integrity and Plagiarism: <http://www.bothell.washington.edu/wacc/for-students/eslhandbook>

Please see the 472 syllabus for the tentative course schedule for the quarter. Schedule subject to change at instructor's discretion.