Course Syllabus

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General Information

Instructor

Jeremy Hess, MD, MPH

Associate Professor, Emergency Medicine, Environmental & Occupational Health Sciences, and Global Health

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Meetings by appointment

Teaching Assistants

Trevor Peckham, PhD student, Environmental and Occupational Health Sciences

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Meetings by appointment

Frank Ryou, PhD student, Environmental and Occupational Health Sciences

Email: hryou@uw.edu (mailto:hryou@uw.edu)

Meetings by appointment

Schedule: T Th 10:35-12:30

Class begins promptly at 10:35. This allows an extra five minutes to accommodate students coming from a preceding class elsewhere on campus. The final exam will be administered on Monday, 6/4, 10:30-12:20.

Location: Health Sciences Building room T439

Class website

Course Description

This course provides a graduate-level overview of the multidisciplinary field of environmental and occupational health, including food systems and nutrition. The four-credit course covers a broad spectrum of environmental hazards and contexts, their interactions with human health and well-being, and their relevance to the effective assurance and promotion of public health. The course places special emphasis on considerations related to food systems and nutrition. Environmental, occupational, and nutritional problems in different settings (e.g. the workplace, community, and home) and at varying scales (local, regional, and global) are considered, with frequent use of case examples from high-, middle-, and low-income countries. The course stresses examining environmental health concerns from a systems perspective and in the context of social, economic, and other determinants of health.

This course satisfies the MPH core requirement in environmental health sciences. This course should be useful for public health and health care professionals, environmental scientists and engineers, public administrators, or any student who wants a broad overview of relationships between the environment and human health in a wide range of contexts.

Pre-requisites: None, though the course is limited to graduate students.

Learning objectives

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

1. **Foundations:** Describe and discuss foundational concepts and strategies of environmental and occupational health sciences, including nutrition, and draw generalizable conclusions about how they apply in different situations and at various scales.
2. **Global Health:** Contrast environmental health problems including concerns related to food systems and food security between higher-income and lower-income populations; and discuss impacts of global social, economic and environmental trends on environmental public health.
3. **Contexts and Systems:** Apply foundational concepts and strategies to environmental health problems from a systems perspective; characterize broader environmental and social contexts and complex system dynamics; and assess cumulative influences on health including nutrition, wellbeing, and equity.
4. **Policy:** Develop evidence-based and sustainable strategies to improve health, wellbeing and equity related to an environmental, occupational, or nutritional public health problem.
5. **Communication:** Communicate information in plain language to a target audience about environmental health risks, influential factors, and prevention strategies.
6. **Professionalism:** Perform effectively on a team (pair); promote collegiality, inclusion, trust, and ethical principles in learning experiences.

*For simplicity, the term “environment” here encompasses work environments.

Supportive learning objectives: At the end of the course, the student should be able to:

1. **Foundations**
    1. Hazards: Specify major (representative) chemical, microbial, and physical health hazards found in air, water, food, soil, and waste; describe their principal effects on health.
    2. Cycles: Characterize nutrient and other major cycles relevant to public health and describe these cycles in terms of sustainability and system dynamics.
    3. Nutrition: Describe fundamental principles of nutrition and malnutrition; describe principles of metabolism and energy balance; characterize the role and function of micronutrients; discuss important linkages between nutrition and health
    4. Exposures: Describe basic strategies for identifying, evaluating, preventing, and controlling exposures to health and safety hazards in environmental and occupational settings.
    5. Health risks: Describe basic strategies to assess health risk and identify acceptable levels of risk associated with environmental hazards.
    6. Vulnerability: Discuss the importance of factors that contribute to individual and population vulnerability, such as biological susceptibility, existing health or social disparities, and cumulative burden of health impacts.
    7. Values: Discuss the importance of equity, justice and sustainability in addressing problems related to the environment and health.
2. **Global Health**
    1. Contrasts: Compare and contrast environmental health problems and applicable policies between high-, middle-, and low-income countries, populations, and settings.
    2. Trends: Describe and discuss potential impacts of demographic change, economic development, energy demand, human-modified environments, global-scale pollution, and global environmental change on human health, food security, water security, and equity.
3. **Contexts and Systems**
    1. Environmental context: Identify and discuss how the current or changing status of natural ecosystems and human-altered environments might influence health, wellbeing, and equity.
    2. Systems: Identify and describe the scope, scale, and dynamics of major systems relevant to environmental health; describe impacts of these systems and their dynamics on health.
    3. Social context: Identify and discuss how socioeconomic, political, cultural, behavioral and perceptual factors might interact with environmental factors and influence health risks.
    4. Systems thinking: Examine relationships between system structure and dynamics, environmental hazards, social contexts, and vulnerability on health, wellbeing, and equity; discern how complex system dynamics complicate management of associated risks.
    5. Food systems: Describe major food production and distribution systems with attention to scope and scale; discuss the relationship between food environments, food security, and food sovereignty
4. **Policy**
    1. Stakeholders: Identify stakeholders; characterize assets, power and inequities, and anticipate needs, concerns, and risk perceptions.
    2. Opportunities: Identify opportunities for and barriers to sustainable changes that promote health, well being, and equity.

3. Alternatives: Formulate evidence-based, context-appropriate, and sustainable alternatives to address the problem and enhance health, well being, and equity.

Course schedule

The course is organized in modules. Each module examines 1-2 major environmental media or domains, with focus on selected case situations that bring in information from more- and less-developed regions. Each module examines representative hazards and human health effects; nutrition, food systems, and food security; mechanisms of exposure, risk and health impact; influences of the broader social and environmental context; population vulnerability and inequity; and general strategies to control exposure and promote health- and equity-favorable change. Most modules introduce a major foundational environmental health concept or strategy, and illustrate application within the module theme. *Preparation for each class session is essential.* The instructor will assume students have completed the assigned readings or viewings. Class sessions will often include short mini-lectures and will also include active, student-engaged approaches to: clarify confusing or problematic points; reinforce key facts, concepts and strategies; apply those concepts and strategies to the selected cases and other examples; and explore the complexity of addressing environmental public health problems in the real world.

Class	Date	Topic	Speaker(s)	Assignments Due (all submitted via Canvas)
1	3/27	Orientation and intro to environmental health	Hess	
2	3/29	Hazards, harms, and environmental media	Hess	
3	4/3	Ecology, systems, and planetary health	Hess	
4	4/5	Environmental epidemiology and policy	Karr, Hess	
5	4/10	Introduction to nutritional science	Averill	1st Systems Exercise
6	4/12	Introduction to food systems	Otten	
7	4/17	Introduction to toxicology	Kavanagh	
8	4/19	Pesticides, occupational exposures	Rosenfeld	2nd Systems Exercise (4/22)
9	4/24	Air pollution	Marshall	
10	4/26	Climate change	Ebi	
11	5/1	Disasters	Errett	

12	5/3	Mid-term exam	N/A	
13	5/8	Water and sanitation	Meschke	3rd Systems Exercise
14	5/10	Nature contact	Wolf	
15	5/15	Waste, hygiene, and food safety	Otten	
16	5/17	Work, poverty, and food security	Otten	Final Policy Paper (5/20)
17	5/22	Built environment	Dannenberg, Hess	
18	5/24	Environmental justice	Hess, Multiple Guests	
19	5/29	Book Reports, Sys Sci Review	Students, Hess	4th Systems Exercise
20	5/31	Future of environmental health	Hess	
21	6/4	Final exam	@ HSB T-747, 10:30am	

Required reading and viewing

Reading and viewing materials will be on the course Canvas site, accessible through module links. Readings will be a mixture of textbook chapters, primary literature, popular texts, online material, videos, and other media. You will be able to access most of the readings through the Canvsas site.

The text, Frumkin's *Environmental Health: From Global to Local (3d Edition)*. Jossey-Bass, 2016, cannot be directly posted on the Canvas site. As a UW student, you have access to the text free of charge as an **e-book (https://ebookcentral-proquest-com.offcampus.lib.washington.edu/lib/washington/detail.action?docID=4405576)** through the UW libraries. If you prefer a physical copy of the text, it is available for purchase or rent from Amazon as well as other retailers.

Some assigned materials are interspersed with ***short assignments*** including questions or provocative statements that may require a multiple choice or short written response. Some questions or prompts only ask the student to “ponder” a point, without written response, as preparation for the class session.

Recommended: The assigned policy brief should be written in “plain language.” The Canvas site will include resources. Students are encouraged to complete the NIH online plain-language training (8 modules).

Assignments

The general categories of assignments are summarized below and then each category is elaborated on further after the summary.

Preparation – before class session

- Reading and viewing
- Questions and prompts
- Food-handler online training

Participation in class

- PollEverywhere responses
- Quick-writes
- Question and oral answers
- Discussions

Exams

- Midterm
- Final

Exercises

- Systems exercises
- Policy brief, references, per review

Preparation: *Preparation for each class session is essential.* Students are required to complete preparatory reading and viewing assignments before each class session. In addition, preparation will be assessed in two ways: through **advance submission of questions for presenters**, and through the **Washington state food handler training**.

> ***Questions for presenters:*** To promote preparation, and engagement with the material, and interaction with presenters, the class will be divided into groups and each group will be responsible for generating questions for an upcoming class day. Questions will be submitted via Canvas. Each student will submit six questions. More information about the process will be available in class. More information on **Student-Generated Question assignments**  .
>
> ***Food handler training:*** As part of a preparation for the nutrition and food systems aspect of the course, students will also complete the **online Washington state food handler training (http://www.foodworkercard.wa.gov)** before Week 8. This takes <1 hour. The training is free, unless you choose to get a food handler card (optional). To demonstrate completion, simply print the "completion screen", right after completion of the exam, as a pdf or screenshot of the completion page, and upload the file to the course assignment page. If you have an active permit, you are not required to take the training but need to upload the copy of the permit (via scanning or taking picture) to the course assignment page.

Participation: Participation in class will include short questions, using the classroom response system PollEverywhere, quick writes, quizzes using Kahoot, and/or verbal student response. For verbal responses or discussion, the instructor will either solicit volunteers or call individual students from a randomly sorted student list. Students will need electronic devices – laptop computers, tablets, or phones – to access PollEverywhere and Kahoot and respond to in-class queries and participate in in-class exercises. Participation will be assessed as binary for a given day, i.e. either a student participates or does not, based

on the activities for the day.

Each class session is weighted equally for the overall course participation grade. Two days of participation scores will be removed from the average without question to account for the occasional illness, scheduling issue, or other concern. If you have an illness or other hardship that requires you to be absent for more than two days please contact the instructor to determine if accommodations are available. Understand that elective commitments that take you away from class more than twice are not considered excusable absences and will instead be reflected in a small decrease in your participation grade.

To limit distractions, students are asked to limit their online activity to what is needed to engage during class.

Exams: There is one in-class mid-term and one final, scheduled as noted on the syllabus.

Exercises: Students will complete two sets of exercises over the course of the quarter. The first set focuses on systems science and analysis of systems relevant to environmental health and food systems. The systems science exercises are aimed at developing individual students' abilities at recognizing, describing, and exploring complex systems and their management. These exercises will be completed individually and will be spread throughout the course. The second set of exercises will be focused on policy and will culminate in a policy brief, which will be done in self-selected pairs. For the policy briefs, students will practice reviewing each others' work according to a specified rubric and giving constructive feedback. *All exercises must be electronically submitted by 5 PM on the due date without exception.* Students are encouraged early to avoid submission mishaps.

The two sets of exercises are outlined below. Additional details will be available at the time assignments are made.

> ***Systems analysis:*** This series of exercises is designed for students to develop and practice skills related to identifying complex systems, communicating about system behavior, using systems thinking to identify potential system management strategies, and using systems science to approach public health problems. Each student will work on his or her own on these exercises. In the first exercise, students will identify and describe several different complex systems relevant to environmental health and nutrition, paying particular attention to their complex dynamics. In the second exercise, students will practice using standard nomenclature and diagram conventions to describe a pre-selected set of systems. In the third exercise, students will search the literature to identify systems science work and summarize its relevance to a chosen environmental health or nutrition issue. In the fourth exercise, students will apply the skills they have developed regarding systems science to policy analyses. Additional details, including specific dates for asignments, will be provided in class.
>
> ***Policy brief; annotated references:*** Each student will work in a self-selected student pair to write one public health policy brief (with annotated reference list) about an environmental health issue of their choice. The topic should be related to a Pacific Northwest case or issue, US federal policy issue, or international policy issue. Topics must be approved by the instructor or a TA. Additional details will be provided during class. According to the Food and Agricultural Organization, a policy brief:

… is a concise summary of a particular issue, the policy options to deal with it, and some recommendations on the best option. It is aimed at government policymakers and others who are interested in formulating or influencing policy. Policy briefs can take different formats. A typical format…contain[s] perhaps 700 words. It has an attractive design, and may have one or more photograph[s]. Longer briefs (up to 8 pages, or 3,000 words) and other formats are also possible." [FAO Food Security Communications Toolkit]

The policy brief for this assignment should be ≤1000 words, not counting references. Since this is an academic exercise, the policy brief should include line-item reference notations linked to a separate annotated reference list. Annotations are optional but encouraged, if a brief statement about the cited reference would be helpful to clarify or support points in the policy brief.

Professionalism, expectations, and shared improvement: Students, instructors, and teaching assistance are expected to perform collaboratively and effectively in their student pairs and to promote collegiality, integrity, inclusion, trust, respect, and ethical principles in all learning experiences.

Part of this relates to maintaining academic integrity. Students at UW are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. The UW School of Public Health 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). You should 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 (**https://www.washington.edu/cssc/ (https://www.washington.edu/cssc/)**).

Professionalism also relates to promoting a classroom climate that fosters inclusion and reflects our collective values. The UW School of Public Health seeks to ensure that all students are fully included in each course. We strive to overcome systemic racism by creating an environment that reflects community, mutual caring, and respect, while we actively work to combat all forms of social oppression. This is a work in progress, as transformation is rarely a fully-completed project. In ENV H 511, 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. I encourage students to talk with the professor, the TA, and/or the program director if you have concerns about classroom climate. **DCinfo@uw.edu (mailto:DCinfo@uw.edu)** is a resource for students with classroom climate concerns.

We have the privilege of learning together and we have a responsibility to engage in dialogue in a way that supports learning for all of us. Here are some practices we as learning community members can strive to use in our learning process:

- My own viewpoint is important—share it. It will enrich others.
- My students' and colleagues' viewpoints are important—listen to them. Do not judge them.
- Extend the same listening respect to others I would wish them to extend to me. We all have room to grow to become better non-judgmental listeners.

- Recognize that I might miss things others see and see things others might miss.
- Raise my views in such a way that I encourage others to raise theirs.
- Inquire into others' views while inviting them to inquire into mine.
- Ask questions when I don't understand something.
- Surface my feelings in such a way that it makes it easier for others to surface theirs.
- Test my assumptions about how and why people say or do things.
- Challenge what was said or done, rather than make assumptions about the individual.
- Beware of either-or thinking.
- Be willing to take risks in moving outside my comfort zones.
- Affirm others.

Please talk with me (JH) right away if I fail to meet these or your expectations, or if you experience or witness disrespect in this class. I will work promptly to address it in a constructive and educational manner, while assuring your privacy. Alternatively, you could communicate your concerns through a course TA, the Graduate Program director (Scott Meschke, jmeschke@uw.edu) or manager (Jon Sharpe, jsharpe@uw.edu) in my department, or your chosen contact person in your department or the Dean's office.

Grading

Weighting of course assignments for overall course grade:

Category	Item	Weight
Preparation		10%
	Questions for presenters	(8%)
	Food handler training	(2%)
Participation		15%
Exercises		40%
	Systems analyses (5% each)	(20%)
	Policy analysis with annotated references	(20%)
Exams		35%
	Midterm	(15%)
	Final	(20%)
Total		100%

Preparation: Graded preparation tasks are scored simply as completed *on time*, or not.

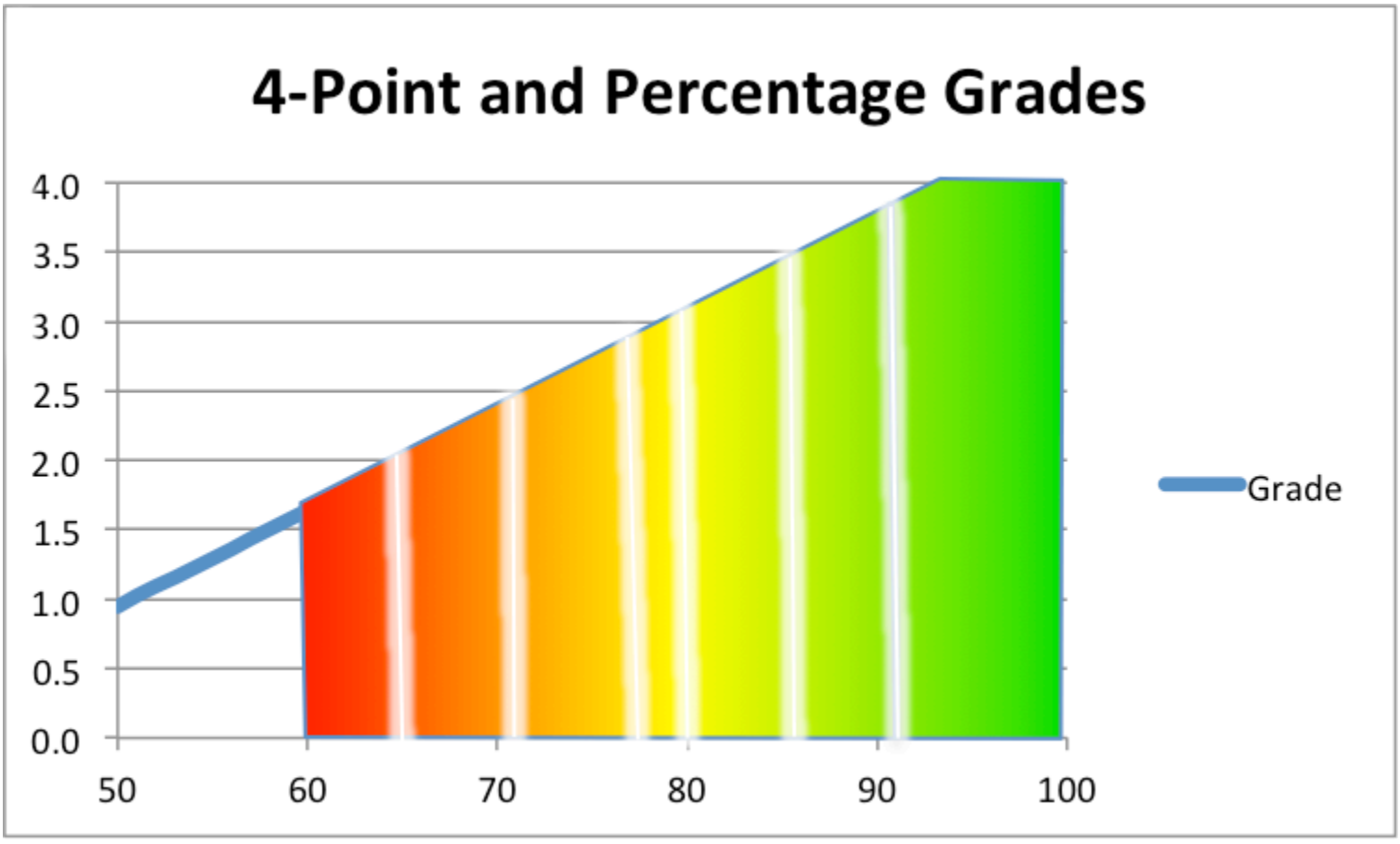
Participation tasks: Each class session is weighted equally for the overall course participation grade, even though the number of tasks differs between sessions. *Verbal responses* to instructor questions or prompts are also scored simply: response or not, regardless of correctness. Repeated exemplary contributions to

class discussion can earn extra participation credit.

Exams are graded on a linear scale. The grading scale ranges from 1.7 to 4.0 on a 4-point scale per UW graduate school policy (https://grad.uw.edu/policies-procedures/graduate-school-memoranda/memo-19-grading-system-for-graduate-students/) . In some instances, numerical grades in percentage form will be assigned; these grades map to the 4-point scale as follows:

Letter	Percentage	GPA Range
A	93-100	3.9-4.0
A-	87-92	3.5-3.8
B+	81-86	3.1-3.4
B	78-80	2.9-3.0
B-	72-77	2.5-2.8
C+	66-71	2.1-2.4
C	60-65	1.7-2.0
F	≤59	0

This image illustrates generally how how percentages are translated into grades on the UW 4-point scale:



Exercises: These are graded categorically, using evaluation rubrics based on course learning objectives. Rubrics will be shared with students before they begin the assignments. Credit is reduced for late submissions by 20% of the grade per day (24 hours). Grading guidelines are:

- 3.9-4.0 - *Excellent work* for a graduate student. Work at this level is unusually thorough, well-reasoned, sophisticated, well-written, and presented. Work shows an incisive and comprehensive understanding of issues and problems, deep engagement with the material, and innovative application of underlying principles.
- 3.5-3.8 - *Very strong work* that is thorough, well-reasoned, and indicates very strong understanding, reasoning and writing/presentation skills, sophisticated engagement with the material, and unquestionable understanding of issues, principles, and approaches.
- 3.1-3.4 - *Strong work* that is is thorough and well-reasoned, indicates strong understanding, reasoning, and writing/presentation skills, clear engagement with the material, and strong understanding of issues, principles, and approaches.
- 2.9-3.0 - *Very good work* that is thorough, well-reasoned, and shows sound to strong understanding, reasoning, and writing/presentation skills, overall substantial engagement with the material, and very good understanding of issues, principles, and approaches, with few if any misunderstandings or errors.
- 2.5-2.8 - *Good work* that is thorough, generally well-reasoned, and shows a good understanding of appropriate approaches to problems and questions. Adequate application of issues and problems with occasionally stronger insights. Minor misunderstandings or errors may be present.
- 2.1-2.4 - *Competent and sound work* that is generally thorough and well-reasoned, and shows sound understanding of appropriate approaches to problems and questions. Shows adequate understanding of issues and problems. Minor misunderstandings or errors are present.
- 1.7-2.0 - *Adequate work* that is moderately thorough and well-reasoned, but understanding of the important issues is not complete. Approaches to address problems and questions are generally adequate. However, the work has some weaknesses or limitations.
- <1.7 - *Unacceptable work* for a graduate student. Work at a high level for an undergraduate is graded in the D range, but otherwise work of this caliber will receive a failing grade.

Access and accommodations

Your experience in this class is important to me (Jeremy Hess, instructor). 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 are 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 policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.

Course Summary:

Date	Details	
Thu Mar 30, 2017	Module 1 Assignment 2 (Environmental Health, Systems) (https://canvas.uw.edu/courses/1131464/assignments/4114981)	due by 10:30am
Tue Apr 11, 2017	In-Class Exercise (Water) (https://canvas.uw.edu/courses/1131464/assignments/4114973)	due by 12:30pm
Thu Apr 20, 2017	Exercise 1: Systems Analysis (https://canvas.uw.edu/courses/1131464/assignments/4114967)	due by 10:30am
Thu Apr 27, 2017	Exercise 1: Systems Analysis - PEER REVIEW (https://canvas.uw.edu/courses/1131464/assignments/4114968)	due by 10:30am
Tue May 30, 2017	Exercise 2: Policy Brief - PEER REVIEW (https://canvas.uw.edu/courses/1131464/assignments/4114970)	due by 10:30am
Tue Mar 27, 2018	Session 1 (3/27) - Introduction to Environmental Health (https://canvas.uw.edu/courses/1131464/assignments/4130613)	due by 10:30am
Wed Mar 28, 2018	Module 1 Assignment 1 (Orientation and Big Picture) (https://canvas.uw.edu/courses/1131464/assignments/4114980)	due by 10:30am
	Session 2 - Prep Assignment (Group 1 Only) (https://canvas.uw.edu/courses/1131464/assignments/4185435)	due by 11:59pm
Thu Mar 29, 2018	Session 2 (3/29) - Hazards, Harms, Media (https://canvas.uw.edu/courses/1131464/assignments/4130703)	due by 10:30am
	Arsenic in Bihar, India (https://canvas.uw.edu/courses/1131464/assignments/4114965)	due by 12:30pm
Mon Apr 2, 2018	Session 3 - Prep Assignment (Group 2 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161096)	due by 11:59pm
Tue Apr 3, 2018	Session 3 (4/3) - Ecology, Systems, Planetary health (https://canvas.uw.edu/courses/1131464/assignments/4130798)	due by 10:30am
Wed Apr 4, 2018	Session 4 - Prep Assignment (Group 3 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161098)	due by 11:59pm
	Session 4 (4/5) - Environmental Epidemiology and Policy	

Thu Apr 5, 2018	(https://canvas.uw.edu/courses/1131464/assignments/4130813)	due by 11:59pm
Mon Apr 9, 2018	Session 5 - Prep Assignment (Group 1 Only) (https://canvas.uw.edu/courses/1131464/assignments/4153464)	due by 11:59pm
Tue Apr 10, 2018	Systems Analysis Exercise 1 (https://canvas.uw.edu/courses/1131464/assignments/4185427)	due by 5pm
	Session 5 (4/10) - Nutrition (Lecture by Michelle Averill) (https://canvas.uw.edu/courses/1131464/assignments/4114985)	due by 11:59pm
Wed Apr 11, 2018	Session 6 - Prep Assignment (Group 2 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161101)	due by 11:59pm
Thu Apr 12, 2018	Session 6 (4/12) - Food Systems (Lecture by Jenn Otten) (https://canvas.uw.edu/courses/1131464/assignments/4114982)	due by 11:59pm
Mon Apr 16, 2018	Session 7 - Prep Assignment (Group 3 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161103)	due by 11:59pm
Wed Apr 18, 2018	Session 8 - Prep Assignment (Group 1 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161105)	due by 11:59pm
Thu Apr 19, 2018	Session 8 (4/19) - Pesticides (Lecture by Mike Rosenfeld) (https://canvas.uw.edu/courses/1131464/assignments/4114991)	due by 11:59pm
Sun Apr 22, 2018	Systems Analysis Exercise 2 (https://canvas.uw.edu/courses/1131464/assignments/4224757)	due by 5pm
Mon Apr 23, 2018	Session 9 - Prep Assignment (Group 2 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161106)	due by 11:59pm
Tue Apr 24, 2018	Session 9 (4/24) - Air Pollution (Lecture by Julian Marshall) (https://canvas.uw.edu/courses/1131464/assignments/4114977)	due by 11:59pm
Wed Apr 25, 2018	Session 10 - Prep Assignment (Group 3 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161107)	due by 11:59pm
Mon Apr 30, 2018	Session 11 - Prep Assignment (Group 1 Only) (https://canvas.uw.edu/courses/1131464/assignments/4186308)	due by 11:59pm
	Midterm Exam (https://canvas.uw.edu/courses/1131464/assignments/4235899)	due by 12:20pm
	Midterm Exam	

Thu May 3, 2018	(https://canvas.uw.edu/courses/1131464/assignments/4235899) (1 student)	due by 1:15pm
	Midterm Exam (https://canvas.uw.edu/courses/1131464/assignments/4235899) (1 student)	due by 3:35pm
Sun May 6, 2018	Midterm Exam (https://canvas.uw.edu/courses/1131464/assignments/4235899) (1 student)	due by 4:50am
Mon May 7, 2018	Session 12 - Prep Assignment (Group 2 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161110)	due by 11:59pm
Tue May 8, 2018	Systems Analysis Exercise 3 (https://canvas.uw.edu/courses/1131464/assignments/4236886)	due by 5pm
	Session 12 (5/8) - Water and Sanitation (Lecture by Scott Meschke) (https://canvas.uw.edu/courses/1131464/assignments/4114984)	due by 11:59pm
Wed May 9, 2018	Session 13 - Prep Assignment (Group 3 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161108)	due by 11:59pm
Thu May 10, 2018	Session 11 (5/1) - Disaster (Lecture by Nicole Errett) (https://canvas.uw.edu/courses/1131464/assignments/4135819)	due by 11:59pm
Mon May 14, 2018	Session 14 - Prep Assignment (Group 1 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161111)	due by 11:59pm
Tue May 15, 2018	Washington state food handler training (https://canvas.uw.edu/courses/1131464/assignments/4115010)	due by 10:30am
	Session 14 (5/15) - Food Waste (Lecture by Jennifer Otten) (https://canvas.uw.edu/courses/1131464/assignments/4114988)	due by 11:59pm
Wed May 16, 2018	Session 15 - Prep Assignment (Group 2 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161112)	due by 11:59pm
Thu May 17, 2018	Session 15 (5/17) - Food Security, Work, Low Wages (https://canvas.uw.edu/courses/1131464/assignments/4135814)	due by 11:59pm
Sun May 20, 2018	Policy Brief (https://canvas.uw.edu/courses/1131464/assignments/4251523)	due by 5pm
Mon May 21, 2018	Session 16 - Prep Assignment (Group 3 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161114)	due by 11:59pm

Tue May 22, 2018	Session 16 (5/22) - Built Environment (Lecture by Andrew Dannenberg) (https://canvas.uw.edu/courses/1131464/assignments/4114976)	due by 11:59pm
Wed May 23, 2018	Session 17 - Prep Assignment (Group 1 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161115)	due by 11:59pm
Thu May 24, 2018	Session 17 (5/24) - Environmental Justice (Lecture by TBD) (https://canvas.uw.edu/courses/1131464/assignments/4135818)	due by 11:59pm
Mon May 28, 2018	Session 18 - Prep Assignment (Group 2 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161116)	due by 11:59pm
Tue May 29, 2018	Extra Credit - Book Review (https://canvas.uw.edu/courses/1131464/assignments/4220455)	due by 5pm
	Extra Credit - Field Experience (https://canvas.uw.edu/courses/1131464/assignments/4220500)	due by 5pm
	Extra Credit - Movie Review (https://canvas.uw.edu/courses/1131464/assignments/4220484)	due by 5pm
	Systems Analysis Exercise 4 (https://canvas.uw.edu/courses/1131464/assignments/4256825)	due by 5pm
Wed May 30, 2018	Session 19 - Prep Assignment (Group 3 Only) (https://canvas.uw.edu/courses/1131464/assignments/4161117)	due by 11:59pm
Thu May 31, 2018	Session 19 (5/31) - Future of Environmental Health (https://canvas.uw.edu/courses/1131464/assignments/4135820)	due by 11:59pm
Mon Jun 4, 2018	Final Exam (https://canvas.uw.edu/courses/1131464/assignments/4251864)	due by 12:20pm
Wed Jun 6, 2018	Final Exam (https://canvas.uw.edu/courses/1131464/assignments/4251864) (1 student)	due by 12pm
	Assignment 4 - Seattle Municipal Water Treatment (https://canvas.uw.edu/courses/1131464/assignments/4114963)	
	Final Exam (2017) (https://canvas.uw.edu/courses/1131464/assignments/4114964)	
	Haiti Case Study In-Class Exercise (Epidemiology and Demographics) (https://canvas.uw.edu/courses/1131464/assignments/4114972)	
	Lec 1 Participation (Mar 27) (https://canvas.uw.edu/courses/1131464/assignments/4182869)	
	Lec 11 Participation (May 1)	

(https://canvas.uw.edu/courses/1131464/assignments/4114999)

Lec 12 Participation (May 8)
(https://canvas.uw.edu/courses/1131464/assignments/4232453)

Lec 13 Participation (May 10)
(https://canvas.uw.edu/courses/1131464/assignments/4115000)

Lec 16 Participation (May 22)
(https://canvas.uw.edu/courses/1131464/assignments/4115001)

Lec 19 Participation (May 31)
(https://canvas.uw.edu/courses/1131464/assignments/4266621)

Lec 2 Participation (Mar 29)
(https://canvas.uw.edu/courses/1131464/assignments/4115002)

Lec 3 Participation (Apr 3)
(https://canvas.uw.edu/courses/1131464/assignments/4209918)

Lec 5 Participation (Apr 10)
(https://canvas.uw.edu/courses/1131464/assignments/4115003)

Lec 6 Participation (Apr 12)
(https://canvas.uw.edu/courses/1131464/assignments/4115004)

Lec 7 Participation (Apr 17)
(https://canvas.uw.edu/courses/1131464/assignments/4115005)

Lec 8 Participation (Apr 19)
(https://canvas.uw.edu/courses/1131464/assignments/4115006)

Lec 9 Participation (Apr 24)
(https://canvas.uw.edu/courses/1131464/assignments/4232451)

Module 10 Assignment 1
(https://canvas.uw.edu/courses/1131464/assignments/4114975)

Module 13 Assignment 1 (Disaster)
(https://canvas.uw.edu/courses/1131464/assignments/4114978)

Module 13 Assignment 2 (Future Trends)
(https://canvas.uw.edu/courses/1131464/assignments/4114979)

Module 6 Assignment (Env Epi, Demographics, Urbanization)
(https://canvas.uw.edu/courses/1131464/assignments/4114986)

Module 6 Assignment 2
(https://canvas.uw.edu/courses/1131464/assignments/4114987)

Module 7 Assignment 2 (Food Safety)
(https://canvas.uw.edu/courses/1131464/assignments/4114989)

Module 7 Assignment 3 (historical) (Food Safety)
(https://canvas.uw.edu/courses/1131464/assignments/4114990)

Module 8 Assignment 1 (historical) (Pesticides and Food-borne Exposures)

(https://canvas.uw.edu/courses/1131464/assignments/4114992)

Module 8 Assignment 2 (historical) (Occupational Exposures)
(https://canvas.uw.edu/courses/1131464/assignments/4114994)

Module 8 Assignment 2 (Occupational Exposures)
(https://canvas.uw.edu/courses/1131464/assignments/4114993)

Module 8 Assignment 3 (Occupational Exposures)
(https://canvas.uw.edu/courses/1131464/assignments/4114995)

Module 9 Assignment 1 (Work, Poverty & Food Security)
(https://canvas.uw.edu/courses/1131464/assignments/4114996)

Policy Brief Paper (historical)
(https://canvas.uw.edu/courses/1131464/assignments/4114997)

Policy Brief: Peer Review (historical)
(https://canvas.uw.edu/courses/1131464/assignments/4114998)

Session 10 (4/26) - Climate Change (Lecture by Kris Ebi)
(https://canvas.uw.edu/courses/1131464/assignments/4114983)

Session 13 (5/10) - Nature Contact (Lecture by Kathy Wolf)
(https://canvas.uw.edu/courses/1131464/assignments/4135656)

Session 18 (5/29) - Systems Science Recap
(https://canvas.uw.edu/courses/1131464/assignments/4258966)

Session 7 (4/17) - Toxicology (Lecture by Terry Kavanagh)
(https://canvas.uw.edu/courses/1131464/assignments/4130966)