# ENV H 311 A Sp 24: Introduction To Environmental Health





(https://canvas.uw.edu/courses/1719026/files/116077422/download? wrap=1)

#### **ENV H 311: Introduction to Environmental Public Health**

## **Spring Quarter 2024**

(3 Credits)

#### **Course Location**

M/W/F: Health Sciences Education Building Room 345

#### **Instructor / Office Hours**



Tania M. Busch Isaksen (she/her)

Teaching Professor

Office: Hans Rosling Bldg, 255-b

Email: tania@uw.edu

Office Hours: By appointment.

## **Syllabus**

<u>Syllabus (https://canvas.uw.edu/courses/1719026/files/118298658?wrap=1) (</u>Updated 2/21/2024 - draft )

<----- Please use the Modules tab to track schedule, required readings, assignments, etc.</p>

### **Graduate Teaching Assistants**

Joey Teresi (he/him)

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Office Hours: by appointment

Mariana Cortes Espinosa (she/her)

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

Office Hours: by appointment

## **Course Description**

This course explores the relationship people have with their environment, the risk management choices made, and the resulting associations that affect health and physical well-being for the individual, communities and susceptible populations. The field of Environmental Public Health, itself, is a professional, interdisciplinary field focused on the science and practice of preventing injury and illness from exposures to hazards in our environments.

ENVH 311 is designed as a survey course and is intended to introduce students to foundational and technical concepts in the field of Environmental Public Health (EPH). Primarily, students will learn how a variety of environmental factors impact health outcomes, the control measures currently used to prevent or minimize the health effects from these negative impacts, and where to access additional information to make a difference at the individual, community or higher level. The course is designed to acquaint the student with the scientific and technical foundations of the field, and examines both practice and research contributions to understanding and controlling environmental hazards. This course also is intended to be a service course, meaning that everyone is touched by EPH principles and topical areas of concern everyday; we all eat, drink, produce waste and breathe air each day. This course delivers important information and resources for the students' own health and wellness advocacy as they move out beyond this institution.

### **Course Meeting Times and Location**

This course is being taught through a didactic lecture format during two of the three class sessions and with a flipped discussion format during the remaining weekly class session. Students are expected to come to each class having read the posted materials for the day. The weekly flipped

discussion sessions are designed to dig deep into the course content, apply learning objectives to new scenarios, explore online tools and resources in a small group setting, and practice interpersonal communication, facilitation, and negotiation skills.

**NOTE:** There is 1 UW-observed holiday that falls on a Monday this Spring quarter. We will not meet on Monday, May 27<sup>th</sup>.

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## Tentative Schedule (updated March 10, 2024)

No	Day	Date	Lesson Topic	Lecturer	
Week	Week 1				
Our c	Our class starts off with a case study module about the Flint, MI water crisis				
1	Mon	March 25	Course Introduction	Dr. Tania Busch Isaksen, DEOHS	
2	Wed	March 27	Recorded lecture: Population Dynamics & Public Health Discussion session: Pop. Dynamics IHME exercise	Dr. Tania Busch Isaksen, DEOHS  Dr. Tania Busch Isaksen, DEOHS	
3	Fri	March 29	Environmental Public Health/Risk Assessment Framework	Dr. Tania Busch Isaksen, DEOHS	
Week	Week 2				
4	Mon	April 1	Toxicology	Dr. Tania Busch Isaksen, DEOHS	

No	Day	Date	Lesson Topic	Lecturer	
5	Wed	April 3	Epidemiology Interactive/Group work session	Dr. Tania Busch Isaksen, DEOHS	
6	Fri	April 5	Exposure Assessment & Control	Dr. Tania Busch Isaksen, DEOHS	
Weel	k 3	•			
7	Mon	April 8	Recorded lecture: Housing Precariousness & Health  Discussion session: Flint, MI Epi/Exposure assessment discussion	Dr. Jamie Vickery, NOAA Dr. Tania Busch Isaksen, DEOHS	
8	Wed	April 10	Environmental Justice & Community Action	Resham Patel, DEOHS	
9	Fri	April 12	Water Resources	Dr. Tania Busch Isaksen, DEOHS	
Weel	Week 4				
10	Mon	April 15	Drinking Water Quality	Joey Teresi, DEOHS	
11	Wed	April 17	Intro. to Occ. Health & Safety	Dr. Marissa Baker, DEOHS	
12	Fri	April 19	Recorded lecture: Flint, MI Wrap Up  Discussion session: Synthesis  Assignment prep	Dr. Tania Busch Isaksen, DEOHS Joey Teresi & Mariana Cortes Espinosa, DEOHS	
Weel	Week 5				

During week 5 we move into a new short module: Food Safety Rocks!

No	Day	Date	Lesson Topic	Lecturer	
13	Mon	April 22	Human Disease Transmission, prevention & Control	Tania Busch Isaksen, DEOHS	
14	Wed	April 24	Food-borne Illness/Outbreak investigation	Ms. Emily Hovis, DEOHS	
15	Fri	April 26	Recorded Lecture: Food Protection & Policy video  Discussion session: Food Safety Rocks	Tania Busch Isaksen, DEOHS	
Weel	Week 6				
Durir	During week 6 we move into a new module: Climate Change and Health				
16	Mon	April 29	Climate Change Basics	Dr. Tania Busch Isaksen, DEOHS	
17	Wed	May 1	Climate Change Health Risks / Heat & Wildfire smoke	Dr. Tania Busch Isaksen, DEOHS	
18	Fri	May 3	Recorded Lecture: Dig Deeper  Discussion Session: Climate Change  Mitigation	Student Directed! Dr. Tania Busch Isaksen, DEOHS	
Week 7					
19	Mon	May 6	Climate Change and Nutrition	Dr. Yona Sipos, DEOHS	
20	Wed	May 8	Zoonotic/ Vector-borne Disease Transmission & Control	Dr. Tania Busch Isaksen, DEOHS	
21	Fri	May 10	Recorded Lecture: Climate Change Communication: Myths & Denial	Dr. John Cook, Skeptical Science	

5/17/24, 2:10 PM			ENV H 311 A Sp 24: Introduction To Environmental Health			
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			<b>Discussion Session:</b> Climate Change Adaptation + preview/prep for synthesis assignment	Dr. Tania Busch Isaksen, DEOHS		
Weel	k 8					
Durii	ng weel	k 8 we move	e into a new module: Duwamish River S	Superfund Site		
22	Mon	May 13	Group crowdsource: Historical Overview / Legacy Waste + prep for synthesis assignment	Joey Teresi & Mariana Cortes Espinosa, DEOHS		
23	Wed	May 15	Air Pollution & Health	Mariana Cortes Espinosa, DEOHS		
24	Fri	May 17	Solid/Hazardous Waste Disposal	Tania Busch Isaksen, DEOHS		
Weel	Week 9					
25	Mon	May 20	Alternatives to Landfilling	Tania Busch Isaksen, DEOHS		
26	Wed	May 22	Posted lecture: Wastewater Treatment  – Decentralized  Discussion/class session: Solid waste  & sustainability	Tania Busch Isaksen, DEOHS		
27	Fri	May 24	Wastewater Treatment – Centralized	Tania Busch Isaksen, DEOHS		
Weel	Week 10					
	Mon	May 27	No Class: Memorial Day			
28	Wed	May 29	Sustainability & Green Chemistry	Ms. Nancy Simcox, DEOHS		

No	Day	Date	Lesson Topic	Lecturer	
29 F	Г»:	May 31	Posted Lecture: Radiation Health & Safety	TBD, UW EH&S	
	FII		<b>Discussion/class session:</b> The Perfect Storm / Course Wrap Up	Tania Busch Isaksen, DEOHS	
Week	Week 11				
			No in-person Final		