ENVH 417A: Case Studies in Children's Environmental Health Disparities

**Quarter:** Spring 2021  
**Credits & Grading:** 3 credits, graded  
**Time:** Tuesdays & Thursdays, 2:30 to 3:50 PM, PDT  
**Location:** Join class by clicking here: [Zoom](https://washington.zoom.us/j/92770170473) (You can also join through the link in the course Calendar or through the link in the Upcoming Meetings tab in the Zoom app in Canvas).

**Instructor**

Anne Riederer ScD, Clinical Associate Professor  
([https://deohs.washington.edu/faculty/anne-riederer](https://deohs.washington.edu/faculty/anne-riederer))  
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https://canvas.uw.edu/courses/1449273
Office Hours: Fridays, 9-11AM PDT, on Zoom (https://washington.zoom.us/j/92284622946)  
Click HERE (https://docs.google.com/spreadsheets/d/1GnDe91oyRWy3n2gYd8XhNbsSHimuqaY-MzINSjIRHU/edit?usp=sharing) to sign up for a slot.

Teaching Assistant

Orly Stampfer, MPH, PhD student  
Office: 4225 Roosevelt Way NE, #301  
Email: ostamp@uw.edu (mailto:ostamp@uw.edu); pronouns: she/they  
Office Hours: Tuesdays & Thursdays, 4-5PM PDT on Zoom (https://washington.zoom.us/j/95880068123). Click HERE (https://docs.google.com/spreadsheets/d/1uacrFDy59IRFdaCZBr1Ke_E88uvZ5jjHkFnprKu_usp=sharing) to sign up for a slot. If this time does not work for you, no worries - please email me to set up another time (ostamp@uw.edu (mailto:ostamp@uw.edu)).

Course Description

This course introduces students to the ways in which children are disproportionately affected by environmental health hazards. Through a series of engaging case studies, students learn the core scientific concepts of children’s environmental health while exploring the social, cultural, regulatory, political, and economic factors that lead to children’s health disparities.

Course Syllabus

For a complete course syllabus, please go to the Syllabus (https://canvas.uw.edu/courses/1449273/assignments/syllabus) page. Session-by-session topics, assignments, etc. can be accessed from the Modules (https://canvas.uw.edu/courses/1449273/modules) page.

Classroom Climate

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 with concerns about classroom climate to talk to your instructor, your advisor, a member of the departmental or SPH Diversity Committee and/or the program director. Victoria Gardner, Assistant Dean for Equity, Diversity and Inclusion (vg@uw.edu (mailto:vg@uw.edu)) is also a resource for students with classroom climate concerns.
Bias Concerns

The Office of the Dean has a student concern policy, a faculty concern policy and standard HR procedures for staff concerns. Our 2018 climate survey states that most people in SPH do not report bias incidents because they do not know where to go. Students are encouraged to report any incidents of bias to someone they feel comfortable with, including instructors, advisers or department staff. They can email dcinfo@uw.edu for immediate follow up. Bias concerns can be anonymously and confidentially reported at this link [https://sph.washington.edu/about/diversity/bias-concerns](https://sph.washington.edu/about/diversity/bias-concerns). Data are collected by the Assistant Dean for EDI and the Director of Program Operations for Student and Academic Services and tracked for resolution and areas are identified for further training.

Access and Accommodations

Your experience in this class is important to us. 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 are 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 [http://depts.washington.edu/uwdrs/](http://depts.washington.edu/uwdrs/). 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

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](https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using [the Religious Accommodations Request form](https://registrar.washington.edu/students/religious-accommodations-request/).

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 478-121). We expect you to know and follow the university's policies on cheating and plagiarism, and the [SPH Academic Integrity Policy](https://sph.washington.edu/students/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/).

**Safety**

Call SafeCampus at 206-685-7233 anytime – no matter where you work or study – to anonymously discuss safety and well-being concerns for yourself or others. SafeCampus's team of caring professionals will provide individualized support, while discussing short- and long-term solutions and connecting you with additional resources when requested.

**Writing Resources**

All written assignments for this class must be high quality, well researched, well organized, and well written. Use plain language instead of jargon. The instructors will consider the clarity of writing when grading assignments. Writing is an important transferable skill for all career pathways. Establishing a strong foundation in writing skills will help students be successful throughout their future course work and career. This course includes written assignments with the goal to helping students identify areas of strength and improvement in writing. However, if a student feels that they could benefit from additional opportunities to improve their writing skills, a list of resources at the UW and others accessible online can be found on the SPH website


**University Statement on Privacy of Video Recordings**

This course is scheduled to run synchronously at your scheduled class time via Zoom. These Zoom class sessions will be recorded. The recording will capture the presenter’s audio, video and computer screen. Student audio and video will be recorded if they share their computer audio and video during the recorded session. The recordings will only be accessible to students enrolled in the course to review materials. These recordings will not be shared with or accessible to the public.

The University and Zoom have FERPA-compliant agreements in place to protect the security and privacy of UW Zoom accounts. Students who do not wish to be recorded should:

- Change their Zoom screen name to hide any personal identifying information such as their name or UW Net ID, and
- Not share their computer audio or video during their Zoom sessions.
Course Syllabus

EnvH 417 (Spring 2021, 3 credits)

Course Title:  Case Studies in Children's Environmental Health Disparities
Course Times:  T/Th, 2:30-3:50 PM
Course Location:  Canvas/Zoom

Instructor

Anne Riederer MS, MSFS, ScD  (https://deohs.washington.edu/faculty/anne-riederer)
Clinical Associate Professor, Environmental & Occupational Health Sciences
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Teaching Assistant

Orly Stampfer, email:  ostamp@uw.edu (mailto:rbabadi@uw.edu)

Office Hours

Anne Rieder, Fridays, 9-11AM PDT, on Zoom  (https://washington.zoom.us/j/92284622946) (sign up for individual or group slots HERE  (https://docs.google.com/spreadsheets/d/1GnDe91oyRWy3n2gYd8XhNbsSHimuqaY-MzINSjIRHU/edit?usp=sharing)).

[Contact Anne for questions related to add/drop, incomplete course grades, accommodations, medical emergencies]

Orly Stampfer, Tuesdays & Thursdays, 4-5PM PDT, on Zoom  (https://washington.zoom.us/j/95880068123)  (click HERE  (https://docs.google.com/spreadsheets/d/1luaCrFDY59iRIFdCZBr1Ke_E88uvZ5jHkFnprKutgE/edit?usp=sharing) to sign up for a slot). If this time does not work for you, no worries - please just email me to set up another time (ostamp@uw.edu (mailto:ostamp@uw.edu)).

[Contact Orly for questions related to Canvas, technical problems, schedule, assignments, missed classes, and related concerns]

Course Website:  Canvas
Catalog Course Description: This course introduces students to the ways in which children are disproportionately affected by environmental health hazards. Through a series of engaging case studies, students learn the core scientific concepts of children’s environmental health while exploring the social, cultural, regulatory, political, and economic factors that lead to children’s health disparities.

Syllabus Course Description: This course provides an in-depth introduction to the many ways in which children are disproportionately affected by environmental health hazards. Through real world case studies and knowledge-to-practice activities, students are introduced to the core concepts of children’s environmental health in a multidisciplinary context, emphasizing the foundational scientific principles of exposure assessment, toxicology and epidemiology, as well as the social, cultural, regulatory, political, and economic factors driving disparities in children’s exposures and health impacts. Activities and assignments give students opportunities to identify, evaluate, and synthesize scientific information related to children’s environmental health, describe policy and regulatory approaches to reducing hazards, and recognize stakeholders’ varied perspectives. Activities are also designed to develop proficiency in communicating with a variety of audiences about children’s environmental health disparities and possible solutions.

Diversity requirement: This course is an approved DIV course to fulfill the undergraduate diversity requirement.

Prerequisites: none

Learning Objectives – Upon completing the course, students will be able to:

1. Describe the core concepts of environmental health (toxicity, exposure, susceptibility, risk, and prevention) and apply them in new contexts.
2. Identify the characteristics of children that make them uniquely vulnerable to environmental hazards and contribute to health disparities.
3. Describe the effects of certain key pollutants on children.
4. Locate, organize, and synthesize information about children’s environmental health problems in the context of real world situations.
5. Characterize children’s environmental health disparities nationally and globally in biological, cultural, political, socioeconomic, public health and health care contexts.
6. Describe regulatory, policy, and programmatic approaches to reducing children’s exposures to environmental health hazards.
7. Effectively communicate about children’s environmental health concepts to key audiences.
**Course Format:** This course features student-centered, active and investigative learning. Through case-based instructional strategies, students develop a framework for identifying and applying environmental health concepts to children’s health and to the identification of susceptible populations and solutions. Class time contains a mix of didactics, discussions, student-led presentations, and group problem solving. A series of metacognitive activities are embedded throughout the course to help students take charge of their own thinking and learning.

**Course Requirements -** Each student will be expected to:

- Prepare for each live class session by completing the items noted in the module for each session. This includes assigned readings, watching assigned videos, and completing related homeworks and quizzes.
- Participate actively in class discussions and activities.
- Engage in class-based report outs and roleplays for case studies.
- Work effectively as a team member for the Group Project, including negotiating a team contract, helping research and write a policy brief, and delivering a component of the group presentation.
- Complete the metacognitive activities (course entrance ticket, module exit tickets, end-of-course reflection) and submit on their due dates.

**Preparing for Class:** Reading and viewing assignments for each class session will be available through the course Canvas Modules. These will include both **assigned and suggested readings and video materials**, such as scientific articles, reports and educational products from both governmental and non-governmental organizations, textbook chapters, online modules, and instructional videos.

**Homework Assignments:** Each class session has **homework assignments** that are organized on Canvas under Modules. Homework assignments include short quizzes on the assigned readings/viewings described above. [There are also a few in class assignments.]

**Class Based Activities:** Students will work in small groups to discuss cases (scenarios of children’s environmental health problems in communities) and consider relevant responses such as research studies, a project proposal, a public information product, or other relevant intervention strategies or policy change(s).

**Midterm:** The midterm exam is designed to reinforce students' knowledge and understanding of core concepts in children's environmental health, as well as the lead (Pb) and asthma case studies. The midterm counts for 15% of the overall course grade.
and will be held synchronously, in class on **Thursday, May 6**. More details on the midterm can be found in the Midterm Module.

**Metacognitive Activities:** Evidence shows that students learn better when they actively track and reflect on their own learning process. The **course entrance ticket** helps the instructors assess students’ motivations and overall learning goals, while **module exit tickets** give students the chance to evaluate their own mastery of course content at key time points. The **end-of-course reflection** gives students the opportunity to collate and synthesize their entrance and exit tickets in a thoughtful reflection on their content mastery, its application to their life going forward, and any remaining curiosity/questions. Entrance and exit tickets will be graded credit/no credit, while the end-of-course reflection will be graded.

**Group Project:** The group project on a selected children’s environmental health problem will include: **a team contract, policy brief, and presentation**. Presentations will be conducted during the last sessions of the quarter (May 27 and June 1 & 3). Groups of approximately 5 students will be assigned by the instructor with an effort to include student diversity of academic programs/previous experience. Topics must be an area/issue of children’s environmental health that was not the core focus of the course case studies. An example list of topics is provided in the Group Project Module. Student groups may develop/choose their own topic not on the list with permission of the instructor. All groups must have different topics. Groups will submit their topic ideas in week 5.

**Team Contract:** Public health is a highly collaborative field. Working successfully in a group takes skills, tools, and practice. The team contract gives students a chance to set clear expectations, deadlines, and rules of engagement for the group project, to help ensure a successful collaborative experience. The team contract template can be found in the Group Project Module. The contract must be negotiated and signed by each group member, and submitted by the due date. In the last week of the course, students will use their team’s signed contract to reflect on the collaborative experience (peer evaluations).

**Policy Brief:** The policy brief should be **2 pages max**. Guidance on writing an effective policy brief will be presented in class during Week 4. The brief should include the following components: Aim, Hook, Background Information, Supportive Data, Options/Recommendations. Draft submissions (draft outline, draft policy brief) give students the chance to receive timely and constructive feedback from the instructors. The draft submissions are required, but not graded (they will receive credit/no credit). Final policy briefs are due on the day of your group’s final presentation. Final briefs are graded; a grading rubric will be provided.
Presentation of the topic and your policy brief: Your group will make a 15 minutes max ppt style presentation (10-12 slides) with each group member covering a specific part of the content (the problem you are addressing/relevant background, information and data supporting the problem and need for action, a suggested action/recommended policy or program). Your audience will then have an opportunity to ask questions about your issue and action/policy/program (5 minutes).

Student Evaluation - Course grades are based on:
30% Quizzes/homework assignments*
15% Midterm exam
15% In class participation in discussions and activities
35% Group Project:
   4% Team contract
   15% Policy brief
   15% Oral presentation
   1% Peer evaluation
5% End of Course Reflection
*lowest grade will be dropped

Course & Live Session Outline (by content & dates; see related Modules pages for details)

Week 1
   Tuesday, March 30 - Module: Welcome/introductions
   Thursday, April 1 - Module: Frameworks for thinking about environmental health disparities

Weeks 2 & 3 - Module: Core Concepts in Children's Environmental Health
   Tuesday, April 6 - Core concepts 1
   Thursday, April 8 - Core concepts 2
   Tuesday, April 13 - Core concepts 3 & Exposure Smackdown!
   Thursday, April 15 - Core concepts - epigenetics and intergenerational inheritance

Week 3 - Module: Group Project
   Thursday, April 15 - Group topic brainstorm

Week 4 - Module: Case Study - Lead and Children
Tuesday, April 20 - Lead and children 1 & A conversation with Dr. Adrienne Ettinger, former Chief, Lead Poisoning Prevention and Environmental Health Tracking Branch, U.S. Centers for Disease Control and Prevention (CDC)

Thursday, April 22 - Lead and children 2

**Week 5 - Module: Group Project**

Tuesday, April 27 - Constructing a policy brief; negotiating the group contract

**Weeks 5 & 6 - Module: Case Study - Air Pollution and Asthma**

Thursday, April 29 - Air pollution and asthma 1

Tuesday, May 4 - Air pollution and asthma 2

**Week 6 - Module: Midterm Exam**

Thursday, May 6 - Midterm (in class)

**Week 7 - Module: Group Project**

Tuesday, May 11 - Policy brief workshop (workshopping the outline)

**Weeks 7 & 8 - Module: Case Study - Pesticides and Children**

Thursday, May 13 - Pesticides and children 1

Tuesday, May 18 - Pesticides and children 2

**Week 8 - Module: Group Project**

Thursday, May 20 - Communicating science and risk - presentations

**Week 9 - Module: Case Study - Special Topics**

Tuesday, May 25 - Children at work, children in slums/urban informal settlements

**Weeks 9 & 10 – Module: Group Project**

Thursday, May 27 – Final presentations

Tuesday, June 1 – Final presentations

Thursday, June 3 – Final presentations

**Week 11 - FINALS WEEK** (no final exam; finish your end-of-course reflection and peer evaluations)

**Course Summary:**

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https://canvas.uw.edu/courses/1449273/assignments/syllabus