

ENVH 583: Environmental Health Reading: Thesis Research Proposal Preparation
Spring 2025

Course Information

Course Instructor:

Karen Levy, PhD (she/her)
Hans Rosling Center for Population Health, Room 261
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Office Hours: By appointment

Course TA:

Hilary McLeland-Wieser (she/her)
E-mail: hmclel@uw.edu
Office Hours: Mondays 1-2pm in HRC 202 or by appointment

Course times and locations: Thursdays 1:30 - 2:20 p.m., HSEB 125 (or Zoom if needed)

Course Goals: The primary goal of this 1-credit class is to empower student research through development of research skills, including its emphasis on writing and critiquing research proposals. This course is open to DEOHS students developing Master's thesis or MPH projects as well as PhD students who wish to develop a dissertation or independent research proposal in a structured setting. All enrolled students are required to sign up concurrently for 2 credits of ENVH 700 (or 600) with a faculty advisor who will actively support the proposal development process. The single credit for ENVH 583 is insufficient to support the work needed to develop a good quality proposal. Further, some of the assignments recommend mentor input and the 600- or 700-level credits provide the mechanism for ensuring that input will occur.

During this quarter, students will develop a research or project proposal. ENVH 583 provides milestones for the proposal development process; the development will occur outside of class. Integrated into these milestones are recommendations to meet with and obtain feedback from the student's mentor about the research project and proposal.

Students will review components of research proposals and practice developing effective aims, hypotheses, background materials and analytic strategies. In addition to preparing a complete proposal for his or her research project, there are a few additional requirements including reading assigned materials, reflections about readings, and conducting peer reviews. The final project for the course will be a peer review "study section" modeled after the NIH peer review process.

Class Website: <https://canvas.uw.edu/courses/1800801>

Class Sessions and Learning Remotely: The basic structure of this course is 50 minutes of lecture and/or discussion. This course is in person. Active participation in class discussions supports the learning of everyone in the class. If you are not feeling well or otherwise need to attend remotely please let your instructors know and we will work to accommodate your needs. Participation in the "study section" peer review session must be synchronous.

Course Communication:

- **Course updates** will be posted on Canvas. ***Please make sure your Announcements setting on Canvas is "Notify Immediately" ***
- **Email the instructor and/or TA:** We will strive to answer within 48 hours on weekdays.

About the Course

Learning Objectives: At the end of this course students should be able to:

- Identify and create the key components of a research proposal;
- Demonstrate the ability to conduct literature reviews and gather the critical scientific information related to the research proposal;
- Formulate hypotheses and design experiments to test such hypotheses aimed at advancing knowledge in environment and health sciences;
- Demonstrate writing skills by producing, a clear, concise research proposal with scientifically defensible aims and research approach (methods, analysis plan, expected benefits, limitations);
- Develop the skills to objectively review and write a scientific critique of a colleague's proposal;
- Describe the important concepts related to using human subjects in scientific research;
- Describe the underlying concepts and principles of scientific misconduct and plagiarism;
- Feel empowered to embark on and carry out an independent research project with guidance from a mentor.

What ENVH 583 will and won't provide, and strategies for success in ENVH 583

ENVH 583 will

- Provide structure and deadlines to support your development of a research proposal;
- Provide you with opportunities to learn from and support your peers through the Canvas peer review process;
- Guide you through proposal writing steps and the "study section" scientific peer review process;
- Cover a few additional topics, such as research integrity and analysis planning;
- Provide resources that will be useful for you in carrying out your research and in supporting your career development.

ENVH 583 won't

- Provide guidance to support your identification of a research topic;
- Assess the quality of your research topic, other than through the Canvas and scientific peer reviews;
- Teach skills in specialized topic areas such as qualitative or survey research methods;
- Substitute for the one-on-one work you should be doing with your mentor;

Strategies for success. To maximize your success in this class you are encouraged to:

- Have a solid research topic concept by the start of the quarter and write a strong first draft of your specific aims by week 2;
- Actively engage with your research mentor throughout the quarter;
- Use the course structure and assignments to support your progress;
- Look ahead to skills and challenges you will confront in future years and take advantage of the course resources and recommendations to facilitate your future work.

"Study Section" scientific peer review of other student proposals. In addition to developing and writing your own research proposal this quarter, an important aspect of this course is teaching you to critique scientific proposals. At the end of the quarter, the class will be divided into two or more peer review groups or "study sections". Each group will review the proposals from all students in another group. Students will follow written instructions, briefly summarized here:

- Each student will:
 - Write and present critiques of two proposals following the critique template
 - Consider and score all proposals in their section
 - Turn in their scores and written critiques
- Study section etiquette:
 - Focus on making constructive comments that will help your peers improve their research and write-up
 - Keep details of the peer review confidential – specific discussions and scores should not be shared outside of the “study section” discussion
- After the meeting, each student will receive feedback from study section:
 - Written critiques from two peers
 - A summary evaluation from the instructor and course TA
 - An average score from the study section and the instructor score

Syllabus Resources and Course Norms

Illness Protocol:

If you feel ill or exhibit respiratory or other symptoms, you should not come to class. Seek medical attention if necessary and notify your instructor(s) as soon as possible by email, so we can find a suitable alternative (e.g., Zoom) for you to gain access to the material presented in class and participate.

Please check your email and CANVAS announcements daily BEFORE coming to class. We will send all registered students an email and/or post a CANVAS announcement if we need to conduct class remotely because the instructor or a guest speaker is unable to attend in person.

Inclusion and Diversity: Diverse backgrounds, embodiments and experiences are essential to the critical thinking endeavor at the heart of University education. In SPH, we are expected:

1. To respect individual differences, which may include, but are not limited to, age, cultural background, disability, ethnicity, family status, gender, immigration status, national origin, race, religion, sex, sexual orientation, socioeconomic status and veteran status.
2. To engage respectfully in the discussion of diverse worldviews and ideologies embedded in course readings, presentations and artifacts, including those course materials that are at odds with personal beliefs and values.
3. To encourage students with concerns about classroom climate to talk to their instructor, adviser, a member of the departmental or SPH EDI Committee, the Assistant Dean for EDI, or the program’s director.

Pronouns: We share our pronouns because we strive to cultivate an inclusive environment where people of all genders feel safe and respected. We cannot assume we know someone’s gender just by looking at them. So, we invite everyone to share their pronouns. Professor Levy uses she/her pronouns. Your TA Hilary McLeland-Wieser uses she/her pronouns.

Learning Environment: The Department of Environmental and Occupational Health Sciences (DEOHS) strives to create welcoming and respectful learning environments that promote access and opportunity for all students, regardless of their experiences, perspectives, identities, and abilities. The DEOHS, along with The UW School of Public Health, seek to ensure all students are fully included in each course. We strive to create an environment that reflects community and mutual caring. Students are encouraged to talk to instructors, advisors, members of the departmental or SPH Diversity Committee and/or program director with concerns about the classroom climate.

If you feel like this class is not living up to that commitment, there are several ways you can register your concern and seek resolution:

- If you feel comfortable doing so, begin by discussing your concern with the instructor and/or teaching assistant. Your instructor is expected to take your concerns seriously and work with you to identify a resolution.
- If you are not comfortable discussing the concern with the instructor, or you did so and the issue has still not been resolved, contact Trina Sterry, DEOHS Manager of Student and Academic Services (tsterry@uw.edu) to discuss your concern. She can also connect you to the appropriate member of DEOHS faculty leadership as needed.
- If you prefer to discuss your concern directly with someone from the School of Public Health (SPH) Dean's Office, you can review [the SPH Student Concern Policy](#) and follow the procedures described there, including reaching out to the SPH Assistant Dean for Equity, Diversity and Inclusion, Dr. Victoria Gardner (vg@uw.edu). If you prefer to anonymously report your concern, you can email dcinfo@uw.edu or use [the SPH Bias Incident Report Form](#).
- If your concern is related to a bias incident, you can review [the UW's guidance on reporting bias incidents](#), which includes a link to [the UW Bias Reporting Tool](#).
- If you have experienced sex or gender discrimination, including sexual assault, relationship or intimate partner violence, stalking, sexual harassment, or other sexual misconduct, you have the right to make a formal complaint and request an investigation under Title IX. Information about Title IX reporting options is available at <https://www.washington.edu/titleix/report/>. The University also has other designated offices to help you avoid and/or report sexual harassment: SafeCampus (<https://www.washington.edu/safecampus/>); Office of the Ombud (<https://www.washington.edu/ombud/>); and University Complaint Investigation and Resolution Office (<https://www.washington.edu/uciro/>).

Sexual Harassment: Sexual harassment is a form of harassment based on the recipient's sex that is characterized by:

- Unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature by a person who has authority over the recipient when:
 - Submission to such conduct is an implicit or explicit condition of the individual's employment, academic status, or ability to use University facilities and services, or
 - Submission to or rejection of the conduct affects tangible aspects of the individual's employment, academic status, or use of University facilities.
- Unwelcome and unsolicited language or conduct that creates an intimidating, hostile, or offensive working or learning environment, or has the purpose or effect of unreasonably interfering with an individual's academic or work performance.

If you believe that you are being harassed, or have observed harassment, you can report it to SPH using the [bias concerns link](#). The University also has designated offices to help you: [SafeCampus](#); [Office of the Ombud](#); [Title IX Investigation Office](#); and [University Complaint Investigation and Resolution Office](#).

Academic Integrity Statement: 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](#). 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. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. If you have already established accommodations with Disability Resources for Students (DRS), please activate your accommodations via myDRS so we can discuss how they will be implemented 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), contact DRS directly to set up an Access Plan. DRS facilitates the interactive process that establishes reasonable accommodations. Contact DRS at disability.uw.edu.

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 this website: [Religious Accommodations Policy](#). Accommodations must be requested within the first two weeks of this course using the [Religious Accommodations Request Form](#).

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.

Communication Skills: Communication through writing and speaking is an important and transferable skill for all career pathways. Establishing a strong foundation in communication skills will help you to be successful throughout your future training and career. If you feel that you could benefit from additional opportunities to improve your writing skills in particular, a list of resources at the UW and others accessible online can be found on the SPH website (<https://sph.washington.edu/sites/default/files/2020-09/Writing-Resources-9.24.20.pdf>).

Land Acknowledgement: Washington state is home to 29 federally recognized and multiple unrecognized tribes. We include a land acknowledgment statement as a sign of respect for the original caretakers of the land:

The University of Washington acknowledges the Coast Salish people of this land, the land which touches the shared waters of all tribes and bands within the Duwamish, Suquamish, Tulalip and Muckleshoot nations.

Assignments & Grading

Assignment	Due Date	Points	Notes
Peer review scheduling survey	April 10	1	
Mentor agreement	April 10	1	
Proposal title & 1 st draft of SAs	April 10	3	
Getting Acquainted	April 10	1	
2 nd draft of SAs → mentor	April 17	5	
Mentor communication with Karen	April 17	0	
Annotated bibliography of key papers	April 24	4	
Outline of background/ significance → mentor	April 24	2	
Background/significance draft	May 1	10	
Canvas peer review of background/ significance	May 8	5	
Analysis questionnaire	May 8	2	
Approach draft	May 15	10	
Revised SAs draft	May 22	5	
Full draft of proposal → mentor	May 22	5	
Canvas peer review of approach & SAs	May 29	5	
Final Proposal	June 5 (hard deadline)	25	
Proposal Critique 1	June 13 (hard deadline)	8	Primary reviewer
Proposal Critique 2	June 13 (hard deadline)	8	Secondary reviewer

Course Schedule

Date	Topic	In Class	Resources	Tasks to complete after class (in preparation for following week's class)	Due in Class
Week 1: April 3	<ul style="list-style-type: none"> • Course requirements • Class structure • Proposal elements • Mentor relationship 	<ul style="list-style-type: none"> • Lecture slides • Introductions 	<ul style="list-style-type: none"> • Syllabus • Proposal format guide • Mentor agreement 	<ul style="list-style-type: none"> • Meet with your mentor & draft mentor agreement • Draft proposal title and preliminary specific aims • Indicate peer review availability 	n/a
Week 2: April 10	<ul style="list-style-type: none"> • Specific Aims 	<ul style="list-style-type: none"> • Lecture slides • Discussion of sample Specific Aims pages in pairs 	<ul style="list-style-type: none"> • Specific aims info • Sample proposals 	<ul style="list-style-type: none"> • Update draft specific aims and proposal title page • Meet with mentor and review proposal title and specific aims • Look over student sample proposals 	<ul style="list-style-type: none"> • Mentor agreement [1] • Proposal title & 1st draft of Specific Aims [3] • Peer review availability [1] • Getting Acquainted [1]
Week 3: April 17	<ul style="list-style-type: none"> • Reading the literature • Review library resources 	<ul style="list-style-type: none"> • Librarian guest lecture 	<ul style="list-style-type: none"> • Materials posted on class website • Class library link 	<ul style="list-style-type: none"> • Conduct literature review 	<ul style="list-style-type: none"> • 2nd draft of SAs → mentor [5] • Mentor communication with Karen [0]
Week 4: April 24	<ul style="list-style-type: none"> • Background & Significance 	<ul style="list-style-type: none"> • Topic slides • Discussion of sample Background & significance in pairs 	<ul style="list-style-type: none"> • Materials posted on class website 	<ul style="list-style-type: none"> • Write first draft of background/significance section • Meet with mentor to get feedback on background/significance 	<ul style="list-style-type: none"> • Annotated bibliography of key papers [4] • Outline of background/significance → mentor [2]
Week 5: May 1	<ul style="list-style-type: none"> • Analysis Planning 	<ul style="list-style-type: none"> • Guest lectures: Magali Blanco and Cecilia Martindale 	<ul style="list-style-type: none"> • ENVH583 analysis questionnaire 	<ul style="list-style-type: none"> • Work on ENVH583 analysis questionnaire (share this with your mentor and get feedback) • Peer review of background/significance 	<ul style="list-style-type: none"> • Background/significance draft [10]
Week 6: May 8	<ul style="list-style-type: none"> • Approach/ Limitations/Timeline 	<ul style="list-style-type: none"> • Topic slides • Time in pairs for peer review of background/significance 	<ul style="list-style-type: none"> • Materials posted on class website 	<ul style="list-style-type: none"> • Write first draft of approach section • Meet with mentor to get feedback on approach section 	<ul style="list-style-type: none"> • Peer review of background/significance [5] • Analysis questionnaire [2]

Date	Topic	In Class	Resources	Tasks to complete after class (in preparation for following week's class)	Due in Class
Week 7: May 15	<ul style="list-style-type: none"> • Critiquing proposals • Critiquing literature 	<ul style="list-style-type: none"> • Topic slides • AMA 	<ul style="list-style-type: none"> • Critiquing & Analysis plan resources 	<ul style="list-style-type: none"> • Update SAs • Request mentor comments on revised SAs • Work on creating a full draft of your proposal 	<ul style="list-style-type: none"> • Approach draft [10]
Week 8: May 22	<ul style="list-style-type: none"> • Ethics, scientific misconduct and plagiarism, human & animal subjects 	<ul style="list-style-type: none"> • Topic slides • Paired case study ethics discussion 	<ul style="list-style-type: none"> • Ethics-related materials 	<ul style="list-style-type: none"> • Complete peer review of approach and specific aims • Request mentor comments on full draft of proposal 	<ul style="list-style-type: none"> • Revised SAs draft [5] • Full draft of your proposal → mentor [5]
Week 9: May 29	<ul style="list-style-type: none"> • Specific Aims & Summary Revisited 	<ul style="list-style-type: none"> • Time in pairs for peer review of SAs & Approach 	<ul style="list-style-type: none"> • Materials posted on class website 	<ul style="list-style-type: none"> • Attend research presentations by your peers and think about effective presentation strategies • Finalize full draft of proposal • Review peer review process to ensure you are clear on the assignment 	<ul style="list-style-type: none"> • Peer review of approach & SAs [5]
Week 10: June 5	<ul style="list-style-type: none"> • Making effective presentations • Poster design • Revisit the peer review process 	<ul style="list-style-type: none"> • Topic slides • Discuss poster preferences • Wrap up • Course eval 	<ul style="list-style-type: none"> • Thesis defense presentations • Poster design resources 	<ul style="list-style-type: none"> • Prepare written critiques for your two assigned proposals; Assign preliminary scores 	<ul style="list-style-type: none"> • Final proposal in PDF format; no comments or tracked changes [25] • Optional: Come with questions you might have about the peer review process
Finals Week (times TBD)	<ul style="list-style-type: none"> • Study section scientific peer review 	<ul style="list-style-type: none"> • Attend study section meeting <u>synchronously</u>, • Participate in the discussion • Score all proposals (bring a laptop to your study section meeting) 	<ul style="list-style-type: none"> • Proposal critiquing resources 	<ul style="list-style-type: none"> • Turn in your scores immediately and critiques within 24 hours of your study section meeting 	<ul style="list-style-type: none"> • In-depth review of your two assigned proposals plus some review of the remaining proposals in your section [16]