

Environmental Health Reading: Thesis Research Proposal Preparation

ENVH 583 Spring 2021

Thursdays 1:30 - 2:20, Zoom

Course Information



Course Instructor:

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Office Hours: By appointment. For assistance scheduling, email Randy Katz: katzr2@uw.edu

Course Goals: The primary goal of this 1-credit class is to help students develop research skills through its focus on writing and critiquing research proposals. This course is open to 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. One credit for ENVH 583 is insufficient to support the work needed to develop a good quality proposal.

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 will be requirements 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, each student will be required to read assigned materials, hand in reflections about readings, give status updates, conduct peer reviews, make presentations, and participate actively in class discussions. 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/1449282>

Class Session Zoom Link: Meeting ID: 913 9099 6590 **Passcode:** 356527

<https://washington.zoom.us/j/91390996590?pwd=dzhlZnFQVEpiVFVlN3NZNEdicG44QT09>

Class Sessions and Learning Remotely: The basic structure of this course is 50 minutes of lecture and/or discussion. This course will have both synchronous and asynchronous options. You are invited to determine on a week-to-week basis the option that works for your schedule. For sessions that include considerable class discussion, before the next class session all students will be asked to submit a written reflection to share their perspective of the discussion.

Course Communication:

- **Course updates** will be posted on Canvas. Please make sure your Announcements setting on Canvas is "Notify Immediately".
- **Discussion board:** This is an excellent mechanism for students to get their questions answered and for all students to be able to support each other in this process. It is very likely that other students will have the same question as you, and sharing your questions this way will benefit everyone in the course.
- **Email the instructor:** I 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
- 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

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
- Guide you through proposal writing steps and the peer review process
- Cover a few additional topics, such as research integrity and analysis planning

ENVH 583 won't

- Provide much if any guidance to support your identification of a research topic
- Assess the quality of your research topic, other than through peer review and editing
- 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
- Teach writing skills, other than through peer review and editing feedback

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
- Adhere to all course deadlines
- Take your analysis planning seriously and turn in your analysis questionnaire

Requirements: The requirements for receiving credit for ENVH 583 are listed below. Each of these requirements will be evaluated to determine whether credit will be given for the course. In addition, during this quarter students are required to sign up for 2 credits of ENVH 700 (or 600) with a faculty advisor who will actively support the proposal development process. Some of the assignments require mentor feedback and the 600- or 700-level credits provide the mechanism for ensuring that feedback will occur.

- 1) **Complete all class readings, hand in all assignments, and actively participate in class discussions.** Readings are intended to support your development as a scientist. Often they will form the basis for class discussion. Most written assignments are (intermediate) drafts of the research proposal. **Students are required to turn in assignments on time.** For intermediate drafts, due dates are intended to support your work throughout the quarter.
- 2) **Meet with your research mentor multiple times over the quarter and solicit his/her feedback on your work.** Mentor meetings should include conceptual discussions, plus feedback on the

main study objective(s), proposal title, specific aims and hypotheses, study design, analysis approach, and other details. Students are required to turn in the mentor's feedback on one proposal draft as part of the required coursework.

- 3) **Hand in a complete research proposal.** See the proposal format guide for details. Deadlines to turn in proposal drafts during the quarter are intended to support student progress.
- 4) **Participate in the "Study Section" review of other student proposals.** 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
 - An average score from the study section and the professor's score

Readings:

- Required readings are posted on the class website (see modules section)
- No required textbook
- Multiple additional resources on a variety of topics are posted on the class website.

Grading: To get credit in this course, the student will submit a complete research proposal and complete all other class assignments including: progress updates, participate in peer editing, write critiques for two research proposals written by peers, participate in the study section and score all proposals, actively participate in class discussions, and hand in additional written assignments.

Syllabus Resources and Course Norms

Learning Environment and Classroom Climate: Your success in learning is important to me. In addition to providing materials and assignments to support your success, I will do my best to provide a welcoming and supportive classroom environment. Our learning space is our collective mutual responsibility; as such, we all have a responsibility to engage in dialogue in a way that supports learning for all of us. I propose the following course norms for our class. We will discuss these the first day of class and revise them as needed:

Norms for everyone to follow:

- Be respectful and supportive of our diverse knowledge, experiences and backgrounds
- Affirm and encourage, and respect multiple pathways to learning
- If comfortable, share your questions and work in progress with the whole class

Additional norms for the instructor:

- Teach and help inclusively; adapt to students' different learning styles

- Be flexible and understanding of students' diverse and challenging situations
- Be responsive: check in regularly to confirm students are on track; answer questions; post common questions and their answers on Canvas

In addition to these norms, if you have any comments or suggestions regarding the classroom climate please get in touch with me using the mechanisms described in the *Course Communication* section above. It is my highest priority to address your comments as satisfactorily as possible. However, if you are not satisfied with my response, you may reach out to others at the Department, School, and/or University level. If you wish to follow up with others, we encourage you to first contact Trina Sterry, Manager of Student and Academic Services (tsterry@uw.edu; 206 616-4177) in the Department of Environmental and Occupational Health Sciences.

Multi-cultural Inclusion Commitment and Bias Concerns: Diverse backgrounds, embodiments, and experiences are essential to the critical thinking endeavor at the heart of university education. In SPH, students and faculty are expected:

1. To respect the many social and cultural differences among us, which may include, but are not limited to: age, cultural background, disability, ethnicity, family status, gender identity and presentation, citizenship and immigration status, national origin, race, religious and political beliefs, 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.

Please talk with me right away if you experience disrespect in this class, and I will work to address it in an educational manner. In addition, the School of Public Health 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>. Data are collected by the Assistant Dean for Equity Diversity and Inclusion and the Director of Program Operations for Student and Academic Services and tracked for resolution and areas are identified for further training.

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 478-120). 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](#).

Access and Accommodations: Your experience in this class is important to me. [Disability Resources for Students](#) (DRS) offers resources and coordinates reasonable accommodations for students. If you have already established accommodations with 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 or 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: 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.

Writing Resources: If you or any student feels that you/they could benefit from additional opportunities to improve your/their writing skills, 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/inline-files/Writing-Resources-4.3.19.pdf>).

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.

Course Schedule

See the next page for a 1-page schedule

ENVH 583 CLASS SCHEDULE 2021 (Subject to change)

Date	Topic	Readings	Assignments (Turn in online before class unless a different date has been specified)
Week 1: Apr 1	<ul style="list-style-type: none"> – Course requirements – Class structure – Proposal elements 	Syllabus Specific aims resources	<ul style="list-style-type: none"> • Meet with mentor • Draft proposal title and specific aims • Draft mentor agreement
Week 2: April 8	<ul style="list-style-type: none"> – Reading the literature – Review of specific aims – Review library resources – Peer discussions 	Materials posted on class website; class library link	<ul style="list-style-type: none"> • Meet with mentor and review proposal title, specific aims and hypotheses, study design, etc. • By April 6 turn in proposal survey and signed mentor agreement and respond to scheduling poll • Turn in draft specific aims and proposal title page
Week 3: April 15	<ul style="list-style-type: none"> – Critiquing proposals – Analysis planning – More library resources 	Critiquing & Analysis plan resources; Sample proposals	<ul style="list-style-type: none"> • Turn in updated specific aims & library survey • Be prepared to discuss the sample grant proposal and its critiques; look over student sample proposals • Review ENVH 583 analysis questionnaire and come to class prepared to ask questions
Week 4: April 22	<ul style="list-style-type: none"> – Analysis planning – Peer feedback on specific aims 	Materials posted on class website	<ul style="list-style-type: none"> • Turn in a first proposal draft with updated aims (Note: abstract may be omitted until week 6) • Peer edit your assigned specific aims pages and be ready to discuss your feedback in class
Week 5: April 29	<ul style="list-style-type: none"> – Research requirements: human & animal subjects, Belmont Report, UW rules for student research – Critique of example thesis proposals 	Ethics-related materials & Sample thesis proposals posted on class website	<ul style="list-style-type: none"> • Read the Belmont Report and Resnik’s article: What is ethics and on why is it important? • Fill out the ENVH583 analysis questionnaire for your research project (<u>to turn in by week 7</u>); share this with your mentor and get feedback • By April 28, turn in proposal critiques (also plan to discuss in class)
Week 6: May 6	<ul style="list-style-type: none"> – Ethics, scientific misconduct and plagiarism 	Ethics-related materials posted on class website	<ul style="list-style-type: none"> • Contribute to the online discussion on responsible research conduct before May 6 (see website) • Turn in a complete proposal draft w/ abstract and updated aims (MS word format preferred)
Week 7: May 13	<ul style="list-style-type: none"> – Proposal problem-solving and analysis planning discussion 	Materials posted on class website	<ul style="list-style-type: none"> • Obtain mentor comments on proposal draft • Turn in your ENVH583 analysis questionnaire • Bring your analysis planning questions to class
Week 8: May 20 (May 18: SRD starting at 2:30)	<ul style="list-style-type: none"> – Making effective presentations – Poster design 	SRD Abstracts (see DEOHS website); poster design resources on class website	<ul style="list-style-type: none"> • Turn in an updated proposal draft (MS word format preferred; no comments on this version) • Turn in comments from mentor, either on the proposal draft or separately • Attend SRD Poster Session • During SRD, identify posters using effective presentation strategies; plan to discuss these in class
Week 9: May 27	<ul style="list-style-type: none"> – Peer editing and small group discussion 	Peer proposals	<ul style="list-style-type: none"> • Turn in your peer editing assignment and be ready to discuss your observations in class
Week 10: June 3	<ul style="list-style-type: none"> – Revisit the peer review process – Course evaluation 	Peer review materials on class website	<ul style="list-style-type: none"> • Turn in a complete proposal (final version in PDF format; no comments or tracked changes) • Plan to discuss any outstanding questions about your research proposal in class
Finals Week (times TBD)	<ul style="list-style-type: none"> – Study section peer review 	In-depth review of your two assigned proposals plus some review of the remaining proposals in your section	<ul style="list-style-type: none"> • Prepare written critiques for your two assigned proposals; Assign preliminary scores • Attend study section meeting, participate in the discussion, score all proposals (bring a laptop to your study section meeting) • Turn in your scores immediately and critiques within 24 hours of your study section meeting