## ENVH 583: Environmental Health Reading: Thesis Research Proposal Preparation Spring 2022

# **Course Information**



#### Course Instructor:

Lianne Sheppard, PhD (she/her), Rohm & Haas Endowed Professor Hans Rosling Center for Population Health, Room 263 Tel. 206-616-2722 E-mail: <u>sheppard@uw.edu</u>

Office Hours: By appointment. For assistance scheduling, email Mary Saucier saucier@uw.edu

# Course times and locations: Mondays 2:30 - 3:20, HSB T531

**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/1547426

# Class Session Zoom Link: Meeting ID: 942 0004 8352. Passcode: ENVH583

https://washington.zoom.us/j/94200048352?pwd=SFN1a0trSmduMlorbIRMSHZVb3QrZz09

**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 encouraged to participate synchronously as much as possible.

## **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
- 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
- Guide you through proposal writing steps and the peer review process
- Cover a few additional topics, such as research integrity and analysis planning
- Provide many resources that will be useful for you later in your research process

## ENVH 583 won't

- Provide 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
- In addition to adhering to the limited number of course deadlines, use the course structure and complete the recommended 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. For example, take your analysis planning seriously even if you don't feel ready to do this work

**Requirements and Grading:** The requirements for receiving credit for ENVH 583 are listed on the next page. Each of these requirements will be evaluated to determine whether credit will be given for the course. In brief, to get credit in this course, the student will submit a complete research proposal and complete additional assignments including: participating in peer editing, completing the end of quarter peer review, and writing proposal critiques.

- 1) Hand in a complete research proposal during quarter week 10. See the proposal format guide for details. Students may choose to turn in intermediate proposal drafts during the quarter; these will receive feedback from the course reader and are intended to support student progress.
- 2) Complete a few required intermediate assignments. Two proposal drafts (specific aims and full proposal draft) are required so students can provide peer feedback (called peer editing in this course). There is also one practice critique that will prepare students to successfully complete the peer review during finals week. In addition, students may be asked to reflect on the ethics topic.
- 3) **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
  - A summary evaluation from the instructor and course reader
  - An average score from the study section and the professor's score

Additional recommended coursework: By separating the required from optional recommended assignments, my goal is to support all students, recognizing we all have different learning styles, mentor relationships, and competing demands. The recommended assignments are provided to support your progress. The course reader will provide feedback on assignments that are turned in. In addition:

- 4) Course readings are intended to support your development as a scientist. Often, they will form the basis for class discussion.
- 5) Active participation in class discussions supports the learning of everyone in the class.
- 6) Weekly or bi-weekly mentor meetings over the quarter will help you establish a productive working relationship with your mentor. 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. The mentor agreement is intended to support formalizing this relationship and ensuring it is successful. In an additional effort to ensure a strong mentoring relationship, students are encouraged to turn in the mentor's feedback on one proposal draft as part of the recommended optional assignments.

## **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.

# **Syllabus Resources and Course Norms**

**COVID-Related Expectations:** Per UW policy, this class will be conducted in person. You should only register for this class if you can attend in person, or if you meet the criteria for an accommodation from Disability Resources for Students (DRS), or a special arrangement approved by the SPH Office of the Dean that allows you to take the course remotely.

- Please <u>contact UW Disability Resources for Students (DRS)</u> directly if you feel you may be eligible for an accommodation based on your status as an immunocompromised individual or based on other diagnosed physical or mental health conditions that might prevent you from being able to take classes in-person.
- If you are a student enrolled in a program in SPH, and you are either living with an individual who is
  immunocompromised, OR you are unable to obtain a visa to travel to the US, you may be eligible for a
  "special arrangement" that will allow you to take this course remotely. To further clarify,
  immunocompromised refers to individuals with no/critically weakened immune response to the
  vaccines. Immune compromised is not the same as underlying health concerns which may lead to a
  more severe response to COVID. Requests for special arrangements to take the class remotely should
  have been submitted to and approved by the Students and Academic Services team in the Office of the
  Dean before the beginning of the quarter.

All UW students are expected to complete their vaccine attestation before arriving on campus. Per President Cauce's message March 8, following changes to state and local health policies, masks will become optional inside most University facilities starting March 28, the first day of spring quarter. Masks will continue to be required in clinical and other health-care settings and on public transportation, including UW shuttles. We strongly recommend wearing masks indoors during the first two weeks of spring quarter. Please monitor yourself daily for symptoms and stay home if you are sick. It's also strongly recommended to get tested after travel. Refer to the UW Face Covering Policy for the latest guidance and follow the campus-wide face-covering policy at all times. You are expected to follow state, local, and UW COVID-19 policies and recommendations. If you feel ill or exhibit possible COVID symptoms, you should not come to class. If you need to temporarily quarantine or isolate per CDC guidance and/or campus policy, you are responsible for notifying your instructors as soon as possible by email. If you receive a positive COVID-19 test result, you must report to campus Environmental Health & Safety (EH&S) by emailing covidehc@uw.edu or calling 206-616-3344.

<u>Please check your email daily BEFORE coming to class</u>. If we need to conduct class remotely because the instructor or a guest speaker is complying with UW policies and unable to attend in person. All registered students have a course Zoom link for remote instruction.

**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.
- 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.

**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.

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 listeners in non-judgmental ways.
- 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 we make 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.

In addition, 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 contact the contact Trina Sterry, Manager of Student and Academic Services (tsterry@uw.edu; 206 616-4177).

**Bias concerns:** The Office of the Dean has a <u>student concern policy</u>, 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 <u>dcinfo@uw.edu</u> for immediate follow up. Bias concerns can be anonymously and confidentially reported via the online form found here: <u>https://sph.washington.edu/about/diversity/bias-concerns</u>. Data is 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.

**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 <u>bias concerns link</u>. The University also has designated offices to help you: <u>SafeCampus</u>; <u>Office of the Ombud</u>; <u>Title IX Investigation Office</u>; and <u>University Complaint Investigation and Resolution Office</u>.

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 <u>University of Washington Student Conduct Code</u> (WAC 478-120). We

expect you to know and follow the university's policies on cheating and plagiarism, and the <u>SPH Academic</u> <u>Integrity Policy</u>. Any suspected cases of academic misconduct will be handled according to University of Washington regulations. For more information, see the University of Washington <u>Community Standards and</u> <u>Student Conduct website</u>.

Access and Accommodations: Your experience in this class is important to me. <u>Disability Resources for</u> <u>Students</u> (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 <u>uwdrs@uw.edu</u> or <u>disability.uw.edu</u>. 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: <u>Religious Accommodations Policy</u>. Accommodations must be requested within the first two weeks of this course using the <u>Religious Accommodations Request Form</u>.

**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/inline-files/Writing-Resources-4.3.19.pdf).

**Land Acknowledgement:** 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

#### Topic Readings Tasks to complete this week (see Canvas) Date - Course requirements • Meet with your mentor & draft mentor agreement Syllabus Week 1: – Class structure Specific aims • Review literature March 28 – Proposal elements resources • Draft proposal title and specific aims • Meet with mentor and review proposal title, specific – Reading the literature Materials posted - Review of specific aims on class website; aims and hypotheses, study design, etc. Week 2: – Review library • Conduct literature review class library link April 4 • Update draft specific aims and proposal title page resources - Peer discussions - Critiquing proposals Critiquing & • Turn in updated specific aims for peer editing - Analysis planning Analysis plan • Prepare to discuss the sample grant proposal and its Week 3: resources; Sample critiques; look over student sample proposals April 11 proposals • Review ENVH 583 analysis questionnaire and think about your questions • Write a first proposal draft with updated aims (Note: - Analysis planning Materials posted Week 4: – Peer feedback on on class website abstract may be omitted until later in the quarter) specific aims • Peer edit your assigned specific aims pages and be April 18 ready to discuss your feedback in class • Read the Belmont Report and Resnik's article: - Research requirements: Ethics-related human & animal subjects, materials & What is ethics and on why is it important? Week 5: Belmont Report, UW Sample thesis • Work on the ENVH583 analysis questionnaire; share rules for student research April 25 proposals posted this with your mentor and get feedback - Critique of example on class website • Turn in proposal critiques & discuss in class thesis proposals • Add sections to your proposal draft & update text – Ethics, scientific Ethics-related • Complete the responsible research conduct Week 6: misconduct and materials posted assignment on class website • Strive for completing a first full proposal draft w/ May 1 plagiarism abstract and updated aims - Proposal problem-Materials posted • Request mentor comments on proposal draft Week 7: solving and analysis on class website • Update your ENVH583 analysis questionnaire planning discussion with • Bring your analysis planning questions to class May 9 guest Cynnie Curl – Making effective **SRD** Abstracts • Turn in an updated proposal draft for peer editing Week 8: presentations (see DEOHS (MS word format preferred; no comments on this May 16 – Poster design website); poster version) design resources • Attend research presentations by your peers and on class website think about effective presentation strategies - Peer editing and small Peer proposals • Turn in your peer editing assignment and be ready to discuss your observations in class Week 9: group discussion May 23 - Revisit the peer review • Plan to discuss any outstanding questions about your research proposal or the peer review process in class process Week 10: - NO CLASS --Peer review • Turn in a complete proposal (final version in PDF June 3 Memorial Day materials are on format; no comments or tracked changes) – Course evaluation class website – Study section peer In-depth review of • Prepare written critiques for your two assigned review your two assigned proposals; Assign preliminary scores proposals plus • Attend study section meeting, participate in the Finals Week some review of discussion, score all proposals (bring a laptop to your (times TBD) the remaining study section meeting) proposals in your • Turn in your scores immediately and critiques within 24 hours of your study section meeting section

# ENVH 583 CLASS SCHEDULE 2022 (Subject to change)