Course Syllabus Health and Sustainability ENVH 306

Fall Quarter 2022 (3 Credits)

Course Meeting Times and Location

1:00 - 2:50 p.m. Monday and Wednesday HSEB 325

Course Instructors

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Office Hours: By appointment

Yona Sipos (she/her), Assistant Teaching Professor

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Department of Environmental & Occupational Health Sciences

Office Hours: By appointment

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.

Washington State is <u>home</u> to 29 federally recognized and five unrecognized tribes. Including a statement like the one above demonstrates our collective humility and respect for the original caretakers of the land upon which the UW School of Public Health sits.

Course Description

This course focuses on the intersection of human health and environmental sustainability. Introduces core concepts of sustainability (for health sciences students) and public health (for environmental studies students) and explores the intersections of health and sustainability in specific domains including energy, transportation, the built environment,

food systems, and chemicals. Emphasizes a systems thinking approach to formulating solutions.

Learning Objectives

It is intended that at the completion of this course, each student should be able to:

- 1. <u>Identify and discuss</u> multiple domains of health and sustainability as well as their intersections
- 2. <u>Identify and apply</u> systems thinking to issues relating to health and sustainability
- 3. <u>Describe</u> and apply appropriate methods to investigate health and sustainability issues across multiple sectors, such as energy, transportation, the built environment, food systems, and chemicals
- 4. <u>Make recommendations and communicate</u> to a lay audience the health and sustainability outcomes across a specific sector (group project)
- 5. <u>Analyze</u> a consumer product for its impact on measures of health and sustainability and propose alternative solutions based on what is known about the challenges/barriers (individual project).

Skills Development

- Problem-Based Learning
- Facilitation/negotiation
- Knowledge integration
- Systems thinking
- Written & oral communication

Readings

Required readings are available on the course Canvas site under weekly Modules. You are expected to prepare for class by reading a minimum of 1-2 hours per week.

Class Format

This course is built around problem-based learning pedagogy.

Each week students will read, examine, and dissect an aspect relative to their group's Health & Sustainability challenge, discuss what they already know, identify key issues and hypotheses ("what we think,") and information needed to understand and work through the issues of the challenge. Students assign themselves "learning objectives" to research before the next class session. They come prepared to share their learning with the rest of their group, along with articles, web sites, and other data resources important to the group's learning. Problem-based learning is an iterative process, with each class building on knowledge acquired through student learning objectives.

Note about attendance: Problem-based learning shifts control and power in the classroom from the teacher to students working in small groups. The real work of learning occurs in the group setting, where faculty acts as facilitators rather than teachers. Every group member shares responsibility for reaching the learning objectives, both individually and as a group. When a student misses a PBL meeting, part of the thinking that is needed to work the case will be missing. Discussion won't be as rich, and the group may be stretched too thin to address the learning objectives effectively.

For this reason, students are strongly encouraged to attend all the scheduled class time unless faced with illness or a true emergency. Those who miss meetings will nonetheless be expected to review the list of learning issues or objectives from the missed day, contact classmates to confirm their role in working them, and post work in Canvas in time for discussion. In other words, students should prepare to undertake the same level of effort outside of class that they would have if they had attended the class session.

Communication Skills

Communication through writing and speaking is an important transferable skill for all career pathways. Establishing a strong foundation in communication skills will help you be successful throughout your future course work and career. Therefore, this course includes assignments with the goal to help you identify areas of strength and improvement in your communication. 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 at

https://sph.washington.edu/sites/default/files/inline-files/Writing-Resources-4.3.19.pdf

Course Requirements

- 1. Participation/Individual Assessments: Students are expected to come to class meetings having read and prepared for the day. Questions and comments on the subject matter are encouraged. In addition to participating in group discussions and project work, three individually assigned learning objectives (30 pts/each); a climate elevator pitch (50 pts); and a consumer product project producing a 4-minute class presentation (25 pts) & a written blog post (50 pts) are expected of students. These assessments will be listed on the Canvas website in each applicable class/module, as well as introduced during class (~215 pts).
- 2. Group Project/Assessment: Students will be working in one of four teams focused on specific sectors responsible for the majority of greenhouse emissions, globally. While each student will be individually responsible for learning objectives that contribute to the group's understanding of their sector, greenhouse gas emissions, solutions, etc., each team will be expected to produce a communication product- see additional details below (~50 pts.).
- 3. **Field Trips:** We are planning two field trips during scheduled class hours: one will be located on campus and one will be located off site. Both are of interest relating to public

health and environmental sustainability. Prep reading and logistical information will be posted on canvas.

4. Summary grading breakdown

Assignment	% of total grade
Individual Assessments	215 pts (~80%)
Final Team Project - Oral Presentation & Supporting Written Evidence	50 pts (~20%)

Note: All written assignments must be submitted electronically through Canvas.

Individual Project Details

By the end of the 4th week, each student will have chosen a consumer product and present (during the last week of class) a compelling argument to the class (oral presentation) and lay reader (blog post format) on a substitution or redesign of the product, using health, sustainability, and green chemistry principles in mind (75 pts total). Additional details will be posted on canvas and described during class.

Consideration to the materials used in both the presentation and blog post include:

- a) Should be based on information gathered by the student from: the periodic literature; government, NGO and other websites; and reputable media sources.
- b) Present the following content:
 - Define the Problem: What is the problem? Why is it a problem, i.e. what are the health consequences? Who are the health consequences affecting?
 - Describe the underlying scientific evidence or theories
 - Describe the available solutions/substitutions etc.
 - Conclude with the student's conclusions and recommendations
- c) Consist of a 4-minute PowerPoint presentation (25 pts) to be delivered in class and an accompanying written argument in a blog post format (50 pts).

Group Project Details

During the first week of the course, the class will be divided into 4 four groups that will each analyze health and sustainability within a different sector. Each group will be responsible for preparing a communication piece (YouTube, infographic etc), to a <u>lay</u>

<u>audience</u>, the importance of their topic with respect to public health and environmental sustainability. The group project should:

- Be based on information gathered by the group from peer reviewed literature; government, NGO, and other websites; and reputable media sources
- Present the group's topic-related facts, conclusions, and recommendations to a lay audience; and
- Consist of a communication piece (Infographic or short ~ 2-3 min. YouTube, Instagram Reel, TikTok etc. video) that is tasteful and obeys all copyright laws. If you choose Insta Reel the max post is 90 seconds, so you will likely need to make a couple of videos.
- These group communication pieces will be "debuted" during class on **December 7th**. An accompanying ~2-page "additional information and resources document is also required and will be submitted along with the communication product.

Course Policies

1. **COVID-related expectations**: All UW students are expected to follow state [doh.wa.gov], local, [kingcounty.gov] and UW COVID-19 policies and recommendations.

Please be extra conscientious about masking during the first few weeks of the quarter, because we will have a lot of members of the community traveling and can reasonably expect to see a surge in COVID cases.

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, we will send all registered students an email with a Zoom link for remote instruction. Thank you for your patience and support as we all transition together back to in-person learning!

2. **Academic Integrity** (http://sph.washington.edu/students/academicintegrity/) 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.

Notice: The University has a license agreement with VeriCite, an educational tool that helps prevent or identify plagiarism from Internet resources. Your instructor may use the service in this class by requiring that assignments are submitted electronically to be checked by VeriCite. The VeriCite Report will indicate the amount of original text in your work and whether all material that you quoted, paraphrased, summarized, or used from another source is appropriately referenced.

3. Access and Accommodation

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 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.

Additionally, 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 Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form.

4. Religious Accommodations

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5. Inclusion & Diversity

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

- a. 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.
- b. 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.
- c. 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.

6. Classroom Climate

We are co-creators of our learning environment. It is our collective responsibility to develop a supportive learning environment for everyone. Listening with respect and an open mind, striving to understand others' views, and articulating your own point of view will help foster the creation of this environment. We engage our differences with the intent to build community, not to put down the other and distance our self from the other. Being mindful to not monopolize discussion and/or interrupt others will also help foster a dialogic environment.

The following guidelines can add to the richness of our discussion:

- We assume that persons are always doing the best that they can, including the persons in this learning environment.
- We acknowledge that systematic oppression exists based on privileged positions and specific to race, gender, class, religion, sexual orientation, and other social variables and identities.
- We posit that assigning blame to persons in socially marginal positions is counterproductive to our practice. We can learn much about the dominant culture by looking at how it constructs the lives of those on its social margins.
- While we may question or take issue with another class member's ideology, we will not demean, devalue, or attempt to humiliate another person based on her/his experiences, value system, or construction of meaning.
- We have a professional obligation to actively challenge myths and stereotypes about our own groups and other groups so we can break down the walls that prohibit group cooperation and growth.
 - [Adapted from Lynn Weber Cannon (1990). Fostering positive race, class and gender dynamics in the classroom. *Women Studies Quarterly, 1 & 2, 126-134.*]

We are a learning community. As such, we are expected to engage with difference. Part of functioning as a learning community is to engage in dialogue in respectful ways that supports learning for all of us and that holds us accountable to each other. Our learning community asks us to trust and take risks in being vulnerable.

Here are some guidelines that we try to use in our learning process:

- LISTEN WELL and be present to each member of our group and class.
- Assume that I might miss things others see and see things others 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.
- Extend the same listening to others I would wish them to extend to me.
- Surface my feelings in such a way that I make it easier for others to surface theirs.
- Regard my views as a perspective onto the world, not the world itself.
- Beware of either-or thinking.
- Beware of my assumptions of others and their motivations.
- Test my assumptions about how and why people say or do things.
- Be authentic in my engagement with all members of our class.

7. 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.

8. 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 at this link https://sph.washington.edu/about/diversity/bias-concerns. 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.

9. Sexual Harassment

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

1. 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.
- 2. 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</u> Complaint Investigation and Resolution Office

ENVH 306 Health & Sustainability Fall 2022

Tentative Schedule

Date	CLASS	Class Activity / Prep Material / Assessment Due
Sept 28	Introduction Speakers: Drs Sipos & Busch Isaksen	Introduction PP (30 min) Group Activity (30 min) · Icebreaker · Group norming · Facilitation scheduling · Getting to know your sector Report out to Class (20 min) See canvas for required prep work for this class
Oct. 3	Climate Science Primer: Starting with the Problem in Mind Speaker: Dr Busch Isaksen	Lecture PP (40 min) Group Activity (30 min) Greenhouse gas (GHG) emission sources, by sector Report out to Class (2 min/groups = 10 min total) See canvas for required prep work for this class
Oct. 5	Health Connections Speaker: Dr. Busch Isaksen	Lecture PP (40 min) Group Activity (30 min) Greenhouse effect communication exercise climate elevator pitch assignment Report out to Class (2 min/groups = 10 min total) See canvas for required prep work for this class
Oct. 10	History of sustainability & systems-based thinking Speaker: Dr. Sipos	Lecture PP (40 min) Group Activity (30 min) Sustainability definition, by sector The sustainable wedding cake Report out to Class (2 min/groups = 10 min total) See canvas for required prep work for this class
Oct 12	Group Workday Facilitators: Drs Sipos & Busch Isaksen	Group Work (30 min) Drawdown.org solution exercise, by sector Report out to Class (2 min/groups = 10 min total) Group work (40 min) Refine group definition of sustainability Begin to define your group's project focus Craft and Assign 1st individual learning objectives (30pts) See canvas for required prep work for this class
Oct. 17	Sustainable Product Design Speaker: Nancy Simcox, DEOHS	Lecture ppt (40 min) Group work (30 min) Think Dirty app review Sustainability business exercise Report out to Class (2 min/groups = 10 min total) See canvas for required prep work for this class

Date	CLASS	Class Activity / Prep Material / Assessment Due
Oct 19	Group Workday Facilitators: Drs Sipos & Busch Isaksen	Whole class (10 min max) Revisit the final individual project deliverables Group Work (50 min) Report out #1 LOs – each team member will share their one slide (25 min) Discussion should be rich and include questions about what else you think you should know about each of the Learning Objectives (record in a google doc) Create a group share out piece (25 min) Report out to Class Each group report out (5 min max) to full class (20 min) See canvas for required prep work for this class Assessment Due Learning Objective #1 - individual grade (30 pts)
Oct. 24	Sustainable Campuses - UW Sustainability Speaker: Mar-i-lyn Ostergren, UW Sustainability Office	Guest Lecture ppt (40 min) + 10 min Q&A Group work (30 min) · Craft and Assign 2nd LOs See canvas for required prep work for this class Discussion Post Due • Individual blog topic due - post to discussion (5 pts)
Oct. 26	The Labor of Sustainability Speaker: Maris Zivarts	Guest Lecture ppt (40 min) + 10 min Q&A Group work (30 min) · Check in with each other - how are the 2nd LOs progressing? Does anybody need to change their strategy or focus? · Debrief / voluntarily share climate elevator pitches · Instructions for next class's field trip day See canvas for required prep work for this class Assessment Due · Climate Elevator Pitch (30 pts)
Oct. 31	Field Trip	UW Farm & Mercer residences – sustainable buildings & urban agriculture See canvas for required prep work for this class
Nov 2	Food Systems Speaker: TBD	Guest Lecture ppt (40 min) + 10 min Q&A Group work (30 min) Debrief from Field trip day Check in with each other - how are the 2nd LOs progressing? Does anybody need to change their strategy or focus? See canvas for required prep work for this class
Nov 7	Group Workday Facilitators: Drs Sipos & Busch Isaksen	Group Work (60 min) Report out #2 LOs – share your one slide (25 min) Discussion should be rich and include questions about what else you think you should know about each of the Learning Objectives (record in a google doc) Create a group share out piece (25 min) Discuss solutions! Have you settled on a, or multiple, solutions for your sector? (10 min) Report out to Class Each group report out (5 min max) to full class (20 min) See canvas for required prep work for this class Assessment Due Learning Objective #2 - individual grade (30 pts)

Date	CLASS	Class Activity / Prep Material / Assessment Due
Nov 9	Equitable Energy Transition Speaker: TBD	Guest Lecture ppt (40 min) + 10 min Q&A Group work (30 min) · Craft and Assign 3rd LOs See canvas for required prep work for this class
Nov 14	Transportation: Sustainable Aviation - Matt Saunders, Engineer, Eviation	Guest Lecture ppt (40 min) + 10 min Q&A Group work (30 min) · Check in with each other - how are the 3rd LOs progressing? See canvas for required prep work for this class
Nov 16	Group Workday Facilitators: Drs Sipos & Busch Isaksen	Group Work (60 min) Report out #3 LOs – share your one slide (25 min) Discussion should be rich and include questions about what else you think you should know about each of the Learning Objectives (record in a google doc) Create a group share out piece (25 min) Report out to Class Each group report out (5 min max) to full class (20 min) See canvas for required prep work for this class Assessment Due Learning Objective #3 - individual grade (30 pts)
Nov 21	Storyboard/ Messaging Day	Lecture ppt (20 min) Group Work (50 min) · Message creation Report out to Class 2 min/group summary to the class (10 min) See canvas for required prep work for this class
Nov 23	Creation Day	Group work (80 min) - On your own
Nov 28	Urban Design Speaker: Dr. Jan Whittington	Guest Lecture ppt (40 min) + 10 min Q&A Group work (30 min) · Free time to work on communication project See canvas for required prep work for this class
Nov 30	Field trip	Tentatively scheduled: Climate Pledge Arena See canvas for required prep work for this class
Dec 5	Individual presentations	Whole Class (80 min) · Blog post research presentations o 4 min/person max o 1 ppt slide Assessment Due · PowerPoint (25pts) & blog post (50 pts)
Dec 7	Group Presentations	Whole Class (80 min) Remaining Individual presentations Group project reveal 10 min/group Class reflection/evaluation Assessment Due Group Communication piece and supporting docs (50 pts)
_	Finals week	No Finals!