

Environmental Justice and Public Health Syllabus

Autumn Quarter 2017

ENVH 490, 3 Units



CLASS HOURS: 1:30-2:50pm

CLASS LOCATION: South Campus Center (SOCC) Room #308

OFFICE HOURS: By appointment (make arrangements in class or by email)

INSTRUCTOR

Vanessa Galaviz, Ph.D., M.P.H.
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COURSE DESCRIPTION

Health disparities that disproportionately affect minority and low-income populations may enhance their vulnerability to the effects of environmental pollution. Understanding the challenges, vulnerabilities, and exploitations of minority and low-income populations is important in characterizing the health risks associated with exposure to environmental pollution. In this course, students will learn how socioeconomic inequities can lead to unequal exposures to environmental pollution, resulting in health disparities. Students will evaluate ways to address and minimize health disparities in minority and low-income populations using research to action initiatives including, but not limited to, citizen science and policy. They will also examine how academics, non-profit organizations, community members, and government agencies can collaborate to address health disparities.

COURSE LEARNING OBJECTIVES

- Disproportionate exposures to environmental hazards can magnify adverse health effects in vulnerable communities
- Environmental justice plays a vital role in creating health and social equity
- Assessing community health: Indicator approaches to assessment
- Integrating cumulative health impacts in efforts to address environmental injustices
- Community engagement in risk-related assessments to support environmental justice remedies
- Research to action approaches to minimizing health and social inequities

CLASS FORMAT

- Two lectures weekly that will entail roundtable discussions, debates, and analysis of readings as part of each lecture. Readings will primarily consist of scientific publications, as well as government and community documents. Students are to read the assigned readings before class, to bring copies of the readings to class, and to discuss the readings based on the homework questions and context of the lecture.
- Course is based on lecture material, readings, videos, information on government websites, homework assignments, midterm, computer lab activity, an EJ and public health project, and classroom debates and discussions. No textbook required.
- The first part of the course (classes prior to the midterm) will focus on strengthening the foundational understanding of environmental justice as it relates to environmental public health, methods used to address disparities, understanding risk for marginalized communities, and the role of policy. This half of the course will include the majority of the homework assignments.
- The second half of the course (classes following the midterm) will focus on current initiatives and work that are being implemented to minimize environmental public health disparities. In this half of the course student should be prepared to heavily focus on successfully implementing and finalizing environmental justice and public health projects. There will be minimal homework assignments due to the need to place heavy emphasis on projects.
- Guest Presenters. When appropriate, a subject matter expert may be asked to present a topic to the course. Students are encouraged to engage these special guests through discussion and questioning. Students will be asked to prepare questions for guest presenters in advance of the course sessions.
- Laptops and electronic devices are permitted in class for course-related academic purposes only. Electronic devices that might create a disruption in class should be turned off.
- Students are expected to come to class on time, refrain from packing up belongings before class ends, give full respectful attention while either the instructor or another student is speaking, use courteous, respectful language, and keep comments and questions relevant to the topic at hand.
- According to the University of Washington Office of the Registrar, 1 credit represents a total student commitment of 3 hours each week. Total time includes time spent in class; time devoted to individual conference with instructors; time devoted to reading or other study, problem solving, writing, laboratory work, exercises, or any other activity required of the student. This class is 3 units, therefore, 9 hours of student commitment per week is expected.

PARTICIPATION (10% OF FINAL GRADE):

Students are expected to actively engage in discussions and participate in class discussions, roundtables, and debates. The instructor will evaluate effort, quantity and quality of engagement. Students will be expected to ask questions of guest lecturers.

EXAMS (EACH 20% OF FINAL GRADE):

The midterm and final will consist of multiple choice questions related to lecture material, videos, and readings.

HOMework (20% OF FINAL GRADE), LATE HOMEWORK WILL NOT BE ACCEPTED:

Homework assignments will be based on specified readings, videos, and analysis of current newsworthy events. Links to free access videos will be provided. Students are to bring copies of the readings and news clippings to class and to discuss assignments based on the context of the lecture. As homework students will be asked to submit a written critique of the readings and videos, to be turned in at the end of class. The written critique should be no longer than 1-page using Calibri font with a font size of 12. Homework assignments will also include a paragraph summary of a news worthy article that identifies an environmental justice issue as it relates to environmental public health. The homework break-down is as follows:

| Homework # | Homework Details | Due Date |
|------------|--|------------|
| 1 | Read 1 peer reviewed journal article. Turn in a 1-page write-up | October 2 |
| 2 | Watch a 19-minute video. Turn in a 1-page write-up | October 4 |
| 3 | Read 1 peer reviewed journal article. Turn in a 1-page write-up | October 18 |
| 4 | Read 1 law article. Turn in a 1-page write-up | October 23 |
| 5 | Read a bill and translate it into a one-page visual factsheet for a community audience | October 25 |

ENVIRONMENTAL JUSTICE AND PUBLIC HEALTH PROJECT (30% OF FINAL GRADE):

Purpose: Understanding the environmental justice issues within a community, if any, is an important component in characterizing the magnitude of environmental public health risk caused by environmental pollution. The understanding and characterization risk can then allow for necessary next steps to minimize environmental burden on environmental justice communities. Working alongside community advocates and contributing to action is essential in minimizing and reducing risk on communities. The skills gained from this community project include: translation of complex science, teamwork with colleagues, and community engagement and collaboration, and research to action experience. Students will be paired to work together on a project. Each student is expected to contribute equally to the project. If there is concern due to lack of contribution from a partner speak to the instructor immediately for resolution otherwise the instructor will assume each student contributed equally.

Community Product: A pair of students will work with a community group to develop a product. Examples of products include the following listed. If a student wishes to develop a product not listed, permission from the instructor must be required.

- **Infographic:** Presenting complex information quickly, visually, and clearly can be done through the use of infographics. They have been used in academic settings to explain scientific concepts to the general public. The content is framed using colorful graphics with minimal use of words to immediately capture the audience. Some infographics are also made to be interactive if provided online.

Some examples of infographics:

<http://envhealthcenters.usc.edu/infographics>
<https://oceanservice.noaa.gov/infographics/>

- **2-page policy brief with annotated reference list:** Impacting policy plays a key role in addressing community concerns by mandating accountability for environmental justice action. Environmental public health policy briefs allow for research to be translated and applied in practice to create change in minimizing exposure disparities and improving health. This policy brief should be a concise and concrete summary suggesting policy options to address a community environmental justice concern. Use of graphics such as charts and images should be used when applicable. The policy brief should be no longer than 2-pages (1-page double sided), not counting references. References should be cited using the American Psychological Association (APA) style. APA citation tools can be found on the University of Washington library resources located here: <http://guides.lib.uw.edu/research/citations/apa-style>. Assignments should use Calibri font with a font size of 12. To develop a concrete policy brief, a well-defined problem and its contributing factors should be as specific as possible referencing applicable research and community concerns. The target audience will be state policy makers.

Definition of policy brief: “A policy brief is a concise summary of a particular issue, the policy options to deal with it, and some recommendations on the best option. It is aimed at government policymakers and others who are interested in formulating or influencing policy. Policy briefs can take different formats. A typical format contain[s] perhaps 700 words. It has an attractive design, and may have one or more photograph[s].” [FAO Food Security Communications Toolkit]

Refer to the following resources to craft a policy brief in addition to other resources you find:

<http://writingcenter.unc.edu/policy-briefs/>

https://www.jhsph.edu/research/centers-and-institutes/womens-and-childrens-health-policy-center/de/policy_brief/index.html

- **Community Needs Assessment:** There are different approaches to conducting community needs assessments. Each approach entails community leadership to guide the collaborative partnership and framework. The framework includes: 1) planning 2) implementation 3) analysis 4) summary 5) community report back and 6) community action plan. Every approach should be tailored according to the needs of the community and should be sensitive to cultural and linguistic differences.

Definition of Community Needs Assessment: “A process of collecting, analyzing and reporting information about the *needs* in a community as well as its *strengths* and *assets*. The purpose is to identify unmet community needs and plan ways to meet them.” [UCLA Center for Health Policy Research]

Refer to the following resources to craft a community needs assessment in addition to other resources you find:

<http://healthpolicy.ucla.edu/programs/health-data/trainings/Pages/community-assessment.aspx>

- **3 to 5-minute YouTube video:** The use of videos can have a powerful impact on visual messaging to the target audience. They are an excellent platform for providing education and awareness on any environmental justice issue. The content of the video should be formatted to appeal to the target audience and should capture their interest throughout the video.

Some examples of short and long environmental justice videos:

<https://www.youtube.com/watch?v=rtj6o-cBHQE>

<https://www.youtube.com/watch?v=30xLg2HHg8Q>

https://www.youtube.com/watch?v=dREtXUij6_c

<https://ejcw.org/index.php/watch-the-movie-now/>

Refer to the following resource to craft a video in addition to other resources you find:

<https://itconnect.uw.edu/learn/workshops/online-tutorials/digital-video-workshops/>

Community engagement to develop a useful actionable product for community: The pair of students will be responsible for setting up and hosting 2 meetings throughout the course with the community. Meeting #1: discuss the project and gather input on directionality for the product including target audience and content to be included. Meeting #2: Review the draft product with the community for input on edits (a draft should be sent at least one week before the meeting to the community for review). The pair of students will have one week to incorporate community edits and send a final draft via email to the community representative and instructor. The meetings should be in-person, if possible, unless distance is a factor. If meetings cannot occur in person then a phone or video conference call should be set up depending on community preference. The meetings MUST include the instructor. Prior to the meetings an agenda should be sent out to all those attending the meeting. The student is responsible for hosting the meetings, leading the agenda items, taking notes, and sending out a post-meeting summary to the attendees.

PowerPoint Project Presentation: Each pair of students will be expected to give a 10-minute PowerPoint presentation covering the scope, implementation, and results of their project followed by a 5-minute question-and-answer session with the audience. The quality of your presentation is in big part related to the quality of your preparation. Rehearsing your presentation is important and will improve your communication efforts. Aim for clarity and add figures and tables where applicable. DO NOT use excess text in your PowerPoint slides as you should be able to verbally summarize your point using a few key words on your PowerPoint slides. Points will be deducted for excess text. DO NOT read directly from your slides - practicing will help reinforce this. Points will be deducted for reading directly from your slides.

Identifying a Project: Each pair of students will sign-up for one project with the instructor. The projects and their associated action products are listed below. If students wish to work on a different project and product not listed, permission from the instructor must be required.

| Project # | Project Options | Research to Action Product Options |
|-----------|--|--|
| 1 | Water contaminant exposure among an agricultural residential community | 3 to 5-min YouTube video |
| 2 | Water contaminant exposure among an agricultural residential community | Infographic |
| 3 | Water contaminant exposure among an agricultural residential community | Development of a community needs assessment |
| 4 | Water contaminant exposure among an agricultural residential community | 2-page policy brief |
| 5 | Water contaminant exposure among an agricultural residential community | Develop content for study website and provide place for residents to get updates on study. Work with programmer to create website. |
| 6 | Exposure to ambient air pollution among children in daycare centers | 3 to 5-min YouTube video |
| 7 | Exposure to ambient air pollution among children in daycare centers | Infographic |
| 8 | Exposure to ambient air pollution among children in daycare centers | Develop content for study website and place for residents to get updates on study. Work with PhD student to create website. |
| 9 | Exposure to ambient air pollution among children in daycare centers | Development of a community needs assessment |
| 10 | Exposure to ambient air pollution among children in daycare centers | 2-page policy brief |

Project Deadlines:

| Date | Project Activity |
|------------------|--|
| October 2 | Sign up for an environmental justice and public health project |
| October 13 | 1 st meeting with community |
| November 17 | Draft #1 of product to instructor |
| November 20 | Sign-up for PowerPoint presentation |
| November 24 | Draft #2 of product and 2 nd community meeting |
| December 1 | Final product emailed to the community representative and instructor |
| December 4 and 6 | PowerPoint presentations |

COURSE GRADING

Grading in this course will be based on the following:

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|---------------------------------|--------------------------------|
| Course Participation | 10% |
| Homework Assignments | 20% (each assignment worth 4%) |
| Midterm | 20% |
| Final | 20% |
| Environmental Justice Project | 30% |
| <i>10% Community engagement</i> | |
| <i>10% Product</i> | |
| <i>10% PowerPoint</i> | |

Grades will be assigned on a 4-point scale similar to academic grades (e.g., A = 4.0-3.9, A- = 3.8-3.5, B+ = 3.4-3.2, B = 3.1-2.9, B- = 2.8-2.5, C+ = 2.4-2.2, C = 2.1-1.9, C- = 1.8-1.5, D+ = 1.4-1.2, D = 1.1-0.9, D- = 0.8-0.7, E = 0.0). Grading guidelines are can be found from the University of Washington Grading System

(https://www.washington.edu/students/genclat/front/Grading_Sys.html#GRADE)

Homework Grading:

| Standards | 4 Exemplary | 3 Very Good | 2 Satisfactory | 1 Unacceptable |
|-------------------|--|--|---|--|
| Discussion | Addresses the topic with great clarity; organizes and synthesizes information; and draws conclusions | Addresses the topic with good clarity; moderate organization and synthesis; conclusions are acceptable | Addresses the topic with little; lacks substantive conclusions; sometimes digresses from topic of focus | Presents little to no clarity in formulating conclusions and/or organization |

Project Grading: Grading will be based on an evaluation rubric. Rubrics will be shared with students before they begin their assignment. Students will be expected to peer-review using the evaluation rubric and ask questions of their peers during their presentation.

DIVERSITY, INCLUSION, AND RESPECT

Diverse backgrounds, embodiments and experience are essential to the critical thinking endeavor at the heart of university of education. Therefore, it is expected that you follow the UW Student Conduct Code in your interactions with your colleagues and with the instructor in this course, by promoting an inclusive environment and respecting the many social and cultural differences. These may include but are not limited to: race, ethnicity, age, cultural background, disability, family status, gender identity and presentation, citizenship and immigration status, national origin, religious and political beliefs, sex, sexual orientation, socioeconomic status, and veteran status. Please do not hesitate to contact the instructor if you experience or witness disrespect in the class. Alternatively you can communicate your concerns to the Manager of Student Services and Academic Services, Trina Sterry, at 206-616-4177 or tsterry@uw.edu

UW DISABILITY STATEMENT

Access and Accommodations: Your experience in this class is important to us, and 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 experience barriers based on a disability or temporary health condition, please seek a meeting with Disability Resources for Students (DRS) to discuss and address them. If you have already established accommodations with DRS, please communicate your approved accommodations to your instructor at your earliest convenience so we can discuss your needs in this course. 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. If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (this can 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

UW 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.

DISCLAIMER

The syllabus and/or lecture schedule are subject to change. Any changes will be announced in class and posted on Canvas.

Class Calendar

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|-----------------|--|
| Wk 0 | <p>Wednesday, September 27</p> <ul style="list-style-type: none"> • Introductions, course goals and objectives, format, homework midterm, final, and student expectations • Lecture: Foundational theories of environmental justice |
| Wk 1 | <p>Monday, October 2</p> <ul style="list-style-type: none"> • Lecture: Putting the justice into environmental public health • Read assigned article BEFORE class • Article: Sexton K, et al. (1999). Looking at environmental justice from an environmental health perspective. <i>J. Expo Anal Environ Epidemiol</i>, 9(1), 3-8. • Class Activity: Roundtable discussion • Homework #1 due and is be based on the article by Sexton et al. • Project: Sign up for an environmental justice and public health project |
| | <p>Wednesday, October 4</p> <ul style="list-style-type: none"> • Lecture: Methods and frameworks used to address environmental injustices • Watch the assigned videos BEFORE class • Video 19 minute: https://www.youtube.com/watch?v=gQ-cZRmHfs4 • Homework #2 due and is based on the videos assigned before class |
| Wk 2 | <p>Monday, October 9 GUEST LECTURE</p> <ul style="list-style-type: none"> • Lecture: Health Impact Assessment • Guest Lecturer: Elizabeth Friedman, MD, MPH <p>Read about Dr. Friedman here: http://deohs.washington.edu/environmental-health-news/people-and-places-2017-issue-2</p> |
| | <p>Wednesday, October 11 GUEST LECTURE</p> <ul style="list-style-type: none"> • Lecture: Environmental justice and disasters • Guest Lecturer: Nicole Everrett, PhD, MSPH, CPH, CEM <p>Read about Dr. Everrett here: http://deohs.washington.edu/faculty/errett_nicole</p> <ul style="list-style-type: none"> • Read assigned article BEFORE class • News article: https://www.newyorker.com/news/news-desk/inequality-and-hurricane-harvey |
| | <p>Friday, October 13</p> <ul style="list-style-type: none"> • Project: 1st meeting with community should be completed by this date |
| Wk 3 | <p>Monday, October 16</p> <ul style="list-style-type: none"> • Lecture: Risk assessment part 1: traditional risk assessment and its role in addressing environmental injustices • Read assigned articles BEFORE class in preparation for case-study • News article: http://www.hcn.org/articles/jordan-downs-lives-with-a-toxic-legacy • News article: http://www.scpr.org/news/2017/06/06/72587/jordan-downs-construction-begins-despite-soil-cont/ • Class Activity: Roundtable discussion and debate on Jordan Down case-study |
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| | <p>Wednesday, October 18</p> <ul style="list-style-type: none"> • Lecture: Risk assessment part 2: New approaches for environmental justice communities • Read assigned article BEFORE class. • Article: Solomon G, et al. Integrating Environmental Justice into Public Health: Approaches for Understanding Cumulative Impacts. <i>Front Public Health Serv Sys Res</i> 2016;5(5):9-14 • Homework #3 due and is be based on the article by Solomon et al. |
| Wk 4 | <p>Monday, October 23</p> <ul style="list-style-type: none"> • Lecture: Environmental Justice, public health, and policy • Read assigned article BEFORE class. • Article read ONLY pages 811-822, Section B. Exacerbating Causes: The Structure of Environmental Policymaking: Lazarus, Richard J. (1993). Pursuing “Environmental Justice”: The Distributional Effects of Environmental Protection. <i>Northwestern University Law Review</i>. 787-857. • Homework #4 due and is be based on the article by Lazarus |
| | <p>Wednesday, October 25</p> <ul style="list-style-type: none"> • Lecture: Identifying Environmentally Disadvantaged Communities • Read assigned legislation BEFORE class. • California Senate Bill (SB) 535: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120S535 • Homework #5 due and will consist of development of a one-page visual fact sheet about SB 535 |
| Wk 5 | <p>Monday, October 30</p> <ul style="list-style-type: none"> • Lab: CalEnviroScreen • Lab Location: UW Health Sciences Library Lab C • Watch the assigned CalEnviroScreen training videos BEFORE class. • Training videos 54 minutes: https://oehha.ca.gov/calenviroscreen/training-videos |
| | <p>Wednesday, November 1</p> <ul style="list-style-type: none"> • In-class MIDTERM |
| Wk 6 | <p>Monday, November 6</p> <ul style="list-style-type: none"> • Lecture: Research and Action: What does it mean • Class Activity: Roundtable discussion |
| | <p>Wednesday, November 8</p> <ul style="list-style-type: none"> • Lecture: Community, Academic, Government Partnership: Community Air Monitoring |
| Wk 7 | <p>Monday, November 13</p> <ul style="list-style-type: none"> • Lecture: Community academic partnership to address EJ through research in Yakima Valley • Guest Lecture: Catherine Karr, MD, PhD; Elizabeth Torres, community member of El Proyecto Bienestar Read about Dr. Karr here http://deohs.washington.edu/faculty/karr_catherine Read about El Proyecto Bienestar here: http://deohs.washington.edu/pnash/pnash/epb |

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| | <p>Wednesday, November 15</p> <ul style="list-style-type: none"> • Lecture: Superfund sites and EJ • Guest Lecture: Travis Cook, PhD, MS Read about Dr. Cook here: https://gradientcorp.com/bio/Cook |
| | <p>Friday, November 17</p> <ul style="list-style-type: none"> • Project: Draft #1 of product to instructor should be completed by this date |
| Wk 8 | <p>Monday, November 20</p> <ul style="list-style-type: none"> • Lecture: How citizen science efforts can lead to policy victories to address EJ issues • Guest Lecture: Veronica Eady, JD; Luis Olmedo, Director of Comite Civico Del Valle, Inc. Read about Dr. Eady here: https://www.arb.ca.gov/html/org/eo-bios/bios/veady_bio.htm Read about Mr. Olmedo here: https://www.kcet.org/define/making-a-more-powerful-movement-imperial-county-activist-luis-olmedo Read about Comite Civico Del Valle, Inc. here: https://www.ccvhealth.org/ • Sign-up for PowerPoint presentation |
| | <p>Wednesday, November 22</p> <ul style="list-style-type: none"> • Lecture: Next-gen monitors and GIS to address public health disparities in EJ communities • Guest Lecture: Edmund Seto, PhD Read about Dr. Seto here: http://deohs.washington.edu/faculty/seto_edmund |
| | <p>Friday, November 24</p> <ul style="list-style-type: none"> • Project: Draft #2 of product and 2nd meeting with community should be completed by this date |
| Wk 9 | <p>Monday, November 27</p> <ul style="list-style-type: none"> • Climate Change and Public Health • Guest Lecture: Joe Casola, PhD Read about Dr. Casola here: https://cig.uw.edu/about/people/joe-casola/ |
| | <p>Wednesday, November 29</p> <ul style="list-style-type: none"> • Exposure to water contaminants: Addressing community concerns |
| | <p>Friday, December 1</p> <ul style="list-style-type: none"> • Project: The final product should be emailed to the community representative and instructor by this date |
| Wk 10 | <p>Monday, December 4</p> <ul style="list-style-type: none"> • Student PowerPoint Presentations (10 minute presentation + 5 minute Q&A) |
| | <p>Wednesday, December 6</p> <ul style="list-style-type: none"> • Student PowerPoint Presentations (10 minute presentation + 5 minute Q&A) |
| | <p>December</p> <ul style="list-style-type: none"> • FINAL |

