EnvH 538: Public Health and Built Environment  
Dept. of Environmental and Occupational Health Sciences, UW School of Public Health

UrbDP 538: Public Health and Built Environment  
Dept. of Urban Design and Planning, UW College of Built Environments

***EnvH 538 and UrbDP 538 are taught concurrently***.

Instructors

Andrew L. Dannenberg, MD, MPH
Affiliate Professor, Dept. of Environmental and Occupational Health Sciences, UW School of Public Health, and Dept. of Urban Design and Planning, UW College of Built Environments
Former Team Lead, Healthy Community Design Initiative, National Center for Environmental Health, Centers for Disease Control and Prevention
Email adannen@uw.edu
Office hours by appointment
Phone 404-272-3978 (cell)

Stephanie A. Farquhar, PhD
Affiliate Professor, Department of Health Services, UW School of Public Health
Senior Social Research Scientist, Public Health—Seattle & King County
Email farqs@uw.edu
Office: UW Health Sciences Center Room F351D (F-wing)
Office hours: Mondays 1:00-3:00pm, or by appointment

Class sessions: Thursdays, 5:00pm – 6:50pm, January 10 to March 14, 2019
Location: UW College of Built Environments, Gould Hall, Room 435

Course Description
This interdisciplinary course focuses on the increasing recognition that the design of communities and of buildings can impact human health, especially among vulnerable populations. Community designs that feature parks, sidewalks, trails, public transit, and connectivity among destinations can encourage physical activity, help prevent obesity and its associated health consequences, and reduce dependence on automobiles whose use contributes to air pollution, motor vehicle crashes, and pedestrian injuries. Increased attention to the health implications of the built environment has led to various innovative solutions, such as mixed-use Smart Growth developments, investments in bicycling and pedestrian infrastructure, incentives to reduce gentrification, and the use of health impact assessments to convey health information to community decision-makers.

Course Learning Objectives
At the conclusion of the course, students should be able to:

- Explain how the built environment impacts public health both positively and negatively
- Critique the literature regarding health and built environment including its strengths and weaknesses
- Describe the methods used to assess the built environment and its impact on health and equity
- Describe the options available to promote healthy community design decisions
- Summarize the benefits of and barriers to working in an interdisciplinary environment
Student Evaluation

- Class participation 15%
- Written reflections on readings 30%
- Street and park audit 20%
- 3-5 page paper on research topic 20%
- Two-minute oral testimony 15%

Access and Accommodations

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 us 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 instructors 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.

Academic Integrity

Students at UW are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. UW 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 UW 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 UW regulations. For more information, see the UW Community Standards and Student Conduct website.

Class Schedule and Required Readings


Other readings are provided on Canvas Share Space (https://canvas.uw.edu/).

January 10: Introduction to course; overview of public health and the built environment; Andrew Dannenberg

- MHP Preface.
- MHP Chapter 1. Introduction to healthy places.
January 17:
A. Community redevelopment and affordable housing, Case study: Yesler Terrace; Stephanie Farquhar, and Stephanie Van Dyke, Seattle Housing Authority
B. Mental health, social capital

- MHP Chapter 7. Mental health and the built environment.
- MHP Chapter 8. Social capital and community design.


January 24:
A. Access to healthy food. Guest speaker: Jesse Jones-Smith, PhD, MPH, RD, Associate Professor, Dept. of Health Services & Nutrition Sciences Program, UW School of Public Health, jjoness@uw.edu
B. Community design for air and water quality
C. Jason Roberts TED talk video to be shown in class: https://youtu.be/ntwqVDzdqAU

- MHP Chapter 3. Food environments.
- MHP Chapter 4. Community design and air quality.
- MHP Chapter 6. Community design for water quantity and quality.

- Optional activity: The Built Environment Assessment Training Institute offers two free online training courses on assessing the built environment for (a) Physical Activity, and (b) Nutrition. Time: ~ 4 hours. http://www.med.upenn.edu/beat/online-courses.html
January 31:

**READING REFLECTIONS FOR WEEKS 1 TO 4 DUE by 5:00pm**

**NAME OF PARK AUDIT PARTNER DUE by 5:00pm**

**A. Physical activity; injury.** Guest speaker: **Steve Mooney, PhD,** Acting Assistant Professor, UW Dept. of Epidemiology, Harborview Injury Prevention and Research Center, sjm2186@uw.edu

**B. Nature contact**

- MHP Chapter 2. Community design for physical activity.
- MHP Chapter 5. Injuries and the built environment.
- MHP Chapter 15. Contact with nature.

February 7:

**STREET AND PARK AUDIT DUE by 5:00pm**

**A. Transportation and land use.** Guest speaker: **Mark Hallenbeck, MS,** Director, Washington State Transportation Center; tracmark@uw.edu

**B. Behavioral choices**

**C. Discussion of street and park audit**

- MHP Chapter 10. Transportation and land use.
- MHP Chapter 17. Behavioral choices and the built environment.

February 14:

**A. Climate change, resiliency, disasters.** Guest speaker: **Jeremy Hess, MD, MPH,** Associate Professor, Dept. of Emergency Medicine, UW School of Medicine, and Dept. of Environmental and Occupational Health Sciences, UW School of Public Health, jjhess@uw.edu

**B. Measuring and certifying the built environment.** Andrew Dannenberg

- MHP Chapter 16. Resiliency to disasters.

February 21:

**RESEARCH PROJECT PAPERS DUE by 5:00pm**

A. Local health department panel on healthy community design. Guest speakers:
   Keri Moore, MPH, Healthy Communities Specialist, Snohomish Health District, kmoore@snohd.org; Julie West, MSW, Environmental Health, Public Health - Seattle & King County, Julie.West@kingcounty.gov

B. Policy and legislation

C. Discussion of research project papers

• MHP Chapter 18. Policy and legislation for healthy places.

February 28:

A. Vulnerable populations & health equity. Stephanie Farquhar; Rachel Berney, MCP, PhD, UW Dept. of Urban Design and Planning, rberney@uw.edu

B. Community engagement

• MHP Chapter 9. Vulnerable populations and the built environment.
• MHP Chapter 19. Community engagement in design and planning.
March 7:
A. **Green architecture, healthy buildings.** Guest speaker: Heather Burpee, Research Associate Professor, UW Department of Architecture; Integrated Design Lab; burpeeh@uw.edu; Observational exercise in Gould Hall to be done in class.

B. **Healthy workplaces, health care settings, and schools**
- MHP Chapter 12. Healthy workplaces.
- MHP Chapter 13. Healthy health care settings.

March 14:
**Student presentations in class: Two-minute testimony**

**READING REFLECTIONS FOR WEEKS 5 TO 10 DUE by 5:00pm**
A. **Student testimony**
B. **Built environment in the developing world; future built environments**
- MHP Chapter 23. Urban health in low- and middle- income countries.

**Optional course readings**
- MHP Chapter 21. Training the next generation to promote healthy places. (includes discussion of job opportunities in field)
- MHP Chapter 22. Healthy places research: emerging opportunities.
- MHP Glossary
Class discussions of readings
All assigned readings should be completed prior to class. We plan to allow time for discussion of the readings, as a full class or in small groups, in the second hour of our class sessions. After reading the assigned chapters or articles, jot down notes for your use in these discussions (not to be submitted) to answer the following questions:

1. What do you most want your neighbor or colleague to know about?
2. What is a relevant current event that reflects the readings?
3. What is a lingering question?

For the Making Healthy Places book chapters, there are Discussion Questions available online at http://makinghealthyplaces.com/wp-content/uploads/2011/08/Discussion-Questions.pdf. We may discuss these questions in class as time permits.

Class activities/requirements

Reading Reflections:  **DUE DATES: January 31 and March 14**
For at least 4 of the assigned readings each week (chapters and articles), write one paragraph (typically ¼ to ½ page long, single spaced) responding to the following questions. “Considering the focus of the class on health and built environment issues,

- Should the reading be used in this course next year, using scale of 1 (definitely delete) to 5 (definitely keep)?
- What information in the reading was new to you,
- How does the information in the reading relate to your background and interests,
- How might the information in the reading be useful to you in your future work?”

Deliverables: Set of reading reflections accumulated into a file (Part 1 and Part 2) uploaded to Canvas. Within each set of readings, use MHP chapter number/title or article author’s name as subheadings to clearly identify the reading to which the reflection belongs.

**DUE January 31:** Reflections Part 1 covering weeks 1 to 4 of readings
**DUE March 14:** Reflections Part 2 covering weeks 5 to 10 of readings

Field exercise:  **Street and park audit  DUE DATE: February 7**
1. Review combined street and park audit tool posted on Canvas.
2. Provide instructor with student names in working pairs no later than January 31.
3. Work in pairs with a classmate from another college or school (such as CBE and SPH) to conduct an audit of one local park and an adjacent street that leads to the park.
4. Deliverables to be uploaded to Canvas, clearly labeled to indicate who worked in your group:
   a) Map of park and adjacent street with key features noted.
   b) Completed audit tool for that park and street, including recommendations for how that park and street could be improved.
   c) Up to 10 digital photographs highlighting important features – please use low resolution photos. Include brief captions with each photograph.

Research project paper:  **DUE DATE: February 21**
1. Review research methods and topics listed in Making Healthy Places Chapter 22. 
   Healthy places research: emerging opportunities.
2. Select a topic of interest from this chapter and write a 3-5 page single-spaced paper first describing briefly why the topic is important, and then describing in more detail how you would design a research project to add to our knowledge about this topic. Paper should include:
   • Proposed study design
   • Types of skills research team would need
   • Characteristics of a study population (and of comparison group if needed)
   • Data sources
   • Methods such as surveys, informant interviews, use of existing datasets
   • Types of analyses
   • Ethics concerns (if any)
   • Types of results that might be found in such a study
   • Possible implications of such results.

Deliverable: 3-5 page single spaced paper uploaded to Canvas.

Two-minute testimony: DUE DATE: March 14
1. Pick a current topic related to a proposed change in the built environment (locally or elsewhere) that has health implications.
2. Prepare a two-minute oral testimony that might be delivered to a city council, legislature, zoning board, or other decision-making group conveying the health concerns about the project and how it might be improved to promote health or mitigate adverse health impacts.

Deliverable: Upload topic of testimony to Canvas (one sentence or less), and give a 2 minute (timed) oral presentation during March 14 class. You do not need to submit a written version of what you present to the class.

The topic you pick may be a real or fictional, and may be Seattle-based or from your hometown or elsewhere. You may find a topic in the local newspaper. The proposed project may be favorable to health that you want to support, or could be bad for health that you want to discourage. Your task is to convey to the decision-makers in 2 minutes the impact of the proposal on health and urge them to consider health as part of their decision. Feel free to be creative on your topic. Some examples of possible topics –
   • A bill to close three nearby community schools and build one large new school on cheap land farther from the students it serves
   • A bond issue to provide more funding for new parks and for maintaining existing parks
   • A bill to build a new sports stadium and demolish homes of 1000 low income persons
   • A bill requiring 10% of city transportation funds be used to improve bike and pedestrian infrastructure in the city
   • A zoning proposal to require that houses be built on large lots and to forbid mixed use developments
   • A bill to set aside land for more community gardens (P patches) in the city
   • A proposal to allow apodments (tiny apartments) to be built in Capitol Hill

The format of your 2 minute testimony should be as follows:
   • First introduce yourself: “I am [your real name] representing XYZ organization (real or fictional) or speaking as a public health professional or as a concerned citizen”
   • The location today is Seattle City Council or wherever.
   • The topic today is the proposed bill to do …… (one sentence maximum)
   • Then provide succinctly how the proposed bill affects health and the built environment and how you are urging the decision-maker to vote or to improve the proposal.