

# Course Introduction



## **URBAN 569/MIPM 512: Public Health Systems**

### **Overview**

The URBAN 569/MIPM 512 course will introduce you to the field of public health, including its origins in combatting filth and disease, its historical connections to urban planning, and the role it has played in many societal transformations throughout history. We'll review both the greatest public health achievements and current challenges in the field. You will learn how epidemiology, the underlying science and backbone of public health decision-making, is used to examine population-level health. We will look at examples of how the extent of injury, illness, and disease are measured within a community, how differences between groups can help identify risk factors, and how public health officials use these findings to make data-based decisions.

We'll then turn our attention to the broader public health infrastructure. Our primary focus will be public health, but you will learn about the close ties to the related but distinct healthcare and emergency services systems. We will examine strengths and weaknesses within the public health infrastructure, including how their impacts on our ability to maintain routine operations and to prepare for and respond to critical events. Through this lens, we will emphasize how the public health system might adapt for future anticipated needs, such as climate change related health impacts, and current needs, including more robust funding and modern data systems.

Case studies, readings and discussions will provide you with an opportunity to apply what you've learned to real-world health public health issues. We will cover a range of topics from climate change and disasters (such as hurricanes, large-scale outbreaks, wildfires, and power outages) to mental health, and risk communication. These will showcase real-world examples of how epidemiological methods are applied and how cross-sectoral planning can bolster community readiness and resiliency. Throughout the course we consider how vulnerable populations are often disproportionately impacted by critical events, and how assessing disparities can help us strive toward achieving health equity. While this course focuses on the U.S. public health system, we will also touch on the realities of our global community and connectivity, and how worldwide health systems and initiatives impact public health everywhere.

### **Course Learning Objectives**

At the conclusion of this course, students should be able to:

- Summarize the history of public health;
- Describe the core components and organization of the U.S. public health system;
- Explain the critical role of epidemiology in public health decision-making;

- Interpret epidemiologic measures and public health data as it relates to a public health intervention or policy;
- Identify the major strengths and weaknesses of the public health system and the underlying causes of those strengths and weaknesses;
- Discuss how the elements of the public health, healthcare, and emergency services systems interact;
- Discuss how the social determinants of health contribute to health inequities;
- Understand the public health impact of man-made and natural disasters;
- Explain how the public health system can adapt to and manage threats associated with climate change in order to protect health; and
- Critically examine and critique an inter-agency response to a public health disaster.

## Contacting Your Instructor



I am Nicola Marsden-Haug, your instructor for this course. You can contact me by emailing me at [nicolamh@uw.edu](mailto:nicolamh@uw.edu) or by sending a message to me within Canvas. Please be aware that I teach this course and in addition to another full-time job. I try my best to get back to students as quickly as possible and typically respond within 24 hours, but appreciate your patience. If you haven't heard back within 48 hours, please message me again.