



## Environmental Health 4 + 1 MPH

The Accelerated 4+1 MPH in Environmental Health (EH) allows students to graduate with both a bachelor's degree and a master's degree in five years. The Environmental Health MPH program addresses environmental and occupational health concerns as they relate to public health in Minnesota, the United States and around the world. While completing program requirements, students have the opportunity to explore their own interests by choosing coursework in consultation with their academic advisor. Students must complete a minimum of 42 credits. To complete program requirements, students will choose electives, in consultation with their academic advisor, which may include credits towards a minor.

### PUBLIC HEALTH CORE REQUIREMENTS

16 CREDITS

*The basic curriculum courses are offered online and on-campus:*

**PubH 6020** Fundamentals of Social & Behavioral Science (2 cr)

**PubH 6102** Issues in Environmental & Occupational Health (2 cr) – *required during Senior Year*

**PubH 6250** Foundations of Public Health (2 cr)

**PubH 6320** Fundamentals of Epidemiology\* (3 cr)  
or

**PubH 6341** Epidemiologic Methods I\* (3 cr)

**PubH 6414** Biostatistical Literacy\*\* (3 cr) or

**PubH 6450** Biostatistics I\* (4 cr)

**PubH 6741** Ethics in Public Health: Professional Practice and Policy (1 cr)

**PubH 6751** Principles of Management in Health Services Organizations (2 cr)

*\*\*Students who take PubH 6414 Biostatistical Literacy, must also take one of the following courses:*

**PubH 6107** Excel & Access in Public Health Settings (1 cr)

**PubH 6123** Violence Prevention & Control: Theory, Research, & Application (2 cr)

**PubH 6325** Data Processing with PC-SAS (1 cr)

**PubH 6420** Introduction to SAS Programming (1 cr)

**PubH 6470** SAS Procedures & Data Analysis (3 cr)

**PubH 6755** Planning & Budgeting for Public Health (2 cr)

**PubH 6813** Managing Electronic Health Information (2 cr)

**PubH 6845** Using Demographic Data for Policy Analysis (3 cr)

**PubH 7264** Visualizing Data in R (1 cr)

**PubH 7461** Exploring & Visualizing Data in R (2 cr)

### APPLIED PRACTICE EXPERIENCE

**PubH 7196** (1-5 cr)

### INTEGRATIVE LEARNING EXPERIENCE

**PubH 7194** (1-5 cr)

### ENVIRONMENTAL HEALTH REQUIREMENT

Choose a minimum one course from each category. Students must take a minimum of 3 different courses.

#### 1. Evaluate hazards in various environments

**PubH 6181** Surveillance of Foodborne Diseases & Food Safety Hazards (2 cr)

**PubH 6120** Injury Prevention in the Workplace, Community, & Home (2 cr)

**PubH 6140** Environmental and Occupational Epidemiology (2 cr)

**PubH 6159** Principles of Toxicology I (2 cr)

**PubH 6170** Introduction to Occupational Health & Safety (3 cr)

#### 2. Analyze factors that influence the presence and magnitude of hazards

**PubH 6140** Environmental & Occupational Epidemiology (2 cr)

**PubH 6141** GIS & Spatial Analysis (3 cr)

**PubH 6150** Interdisciplinary Evaluation of Occupational Health & Safety Field Problems (3 cr)

#### PROGRAM COORDINATOR

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- PubH 6159** Principles of Toxicology I (2 cr)  
**PubH 6161** Regulatory Toxicology (2 cr)  
**PubH 6182** Emerging Infectious Diseases: Current Issues (3 cr)  
**PubH 6192** Measurement and Properties of Air Contaminants (2 cr)

### **3. Identify pathways of exposure to environmental hazards**

- PubH 6140** Environmental and Occupational Epidemiology (2 cr)  
**PubH 6141** GIS & Spatial Analysis (3 cr)  
**PubH 6159** Principles of Toxicology I (2 cr)  
**PubH 6181** Surveillance of Foodborne Diseases & Food Safety Hazards (2 cr)  
**PubH 6182** Emerging Infectious Diseases: Current Issues (3 cr)  
**PubH 6193** Advanced Topics in Human Exposure Science (2 cr)  
**PubH 6150** Interdisciplinary Evaluation of Occupational Health & Safety Field Problems (3 cr)

### **4. Integrate exposure and health effects knowledge to investigate health risk and inequity**

- PubH 6112** Environmental Health Risk Assessment: Application to Human Health Risks from Exposure to Chemicals (2 cr)  
**PubH 6130** Occupational Medicine: Principles and Practice (2 cr)  
**PubH 6140** Environmental and Occupational Epidemiology (2 cr)  
**PubH 6141** GIS & Spatial Analysis (3 cr)  
**PubH 6159** Principles of Toxicology I (2 cr)  
**PubH 6181** Surveillance of Foodborne Diseases & Food Safety Hazards (2 cr)  
**PubH 6123** Violence Prevention & Control: Theory, Research, & Application (2 cr)

### **5. Propose risk management strategies, such as education, policy, and technology, directed toward environmental health stakeholders, including government, industry, and community groups**

- PubH 6112** Environmental Health Risk Assessment: Application to Human Health Risks from Exposure to Chemicals (2 cr)  
**PubH 6120** Injury Prevention in the Workplace, Community, & Home (2 cr)  
**PubH 6161** Regulatory Toxicology (2 cr)  
**PubH 6170** Introduction to Occupational Health & Safety (3 cr)  
**PubH 6174** Control of Workplace Exposure (3 cr)  
**PubH 6182** Emerging Infectious Diseases: Current Issues (3 cr)

## **ELECTIVES**

*Students take electives in addition to core and competency requirements to meet the 42 credit minimum. Choose electives in consultation with your advisor. Examples of electives are listed below. If you did not take a course to address one of the five categories listed above, you can use the course as an elective.*

- PubH 6112** Environmental Health Risk Assessment: Application to Human Health Risks from Exposure to Chemicals (2 cr)  
**PubH 6120** Injury Prevention in the Workplace, Community, & Home (2 cr)  
**PubH 6123** Violence Prevention & Control: Theory, Research & Application (2 cr)  
**PubH 6131** Working in Global Health (2 cr)  
**PubH 6132** Air, Water and Health (2 cr)  
**PubH 6135** Job Search Strategies & Career Professional Development (1 cr)  
**PubH 6140** Environmental & Occupational Epidemiology (2 cr)  
**PubH 6141** GIS & Spatial Analysis for Public Health (3 cr)  
**PubH 6154** Climate Change & Global Health (3 cr)  
**PubH 6161** Regulatory Toxicology (2 cr)  
**PubH 6162** Application of Biomarkers in Public Health Research (2 cr)  
**PubH 6170** Introduction to Occupational Health & Safety (3 cr)  
**PubH 6182** Emerging Infectious Diseases: Current Issues (3 cr)  
**PubH 6190** Environmental Chemistry (3 cr)  
**PubH 6192** Measurement & Properties of Air Cont. (2 cr)