



**INTEGRATIVE LEARNING EXPERIENCE
ENVIRONMENTAL & OCCUPATIONAL HEALTH MPH
ESSAY/THESIS AGREEMENT**

MPH students are required to complete an essay or thesis that demonstrates synthesis of foundational and program-specific competencies. Students must submit this agreement approved by their faculty or essay/thesis advisor prior to beginning their essay/thesis.

Student Name: _____

Department: Environmental & Occupational Health

Pitt Email: _____

Advisor Name: _____

Advisor Email: _____

Are you working with data owned by an organization outside of Pitt Public Health?

If yes, please provide the following information.

Organization Name: _____

Organization Contact: _____

Will the organization contact be a member of your essay/thesis committee?

Essay/Thesis Title: Identify the title or topic of your essay/thesis.

Competencies: Identify three competencies that will be attained through essay/thesis activities. Two competencies must be selected from the [CEPH MPH Foundational Competencies](#) and one competency from the [EOH MPH Competencies](#).

- 1.
- 2.
- 3.

Approvals: Please send via Docusign at my.pitt.edu.

Student Signature: _____ Date: _____

Advisor Signature: _____ Date: _____

EOH MPH Competencies

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|-------|---|
| EOH 1 | Describe the chemical processes involved in the interconversion and elimination of atmospheric pollutants, plus the details of water treatments necessary to remove contaminants from the public water supply |
| EOH 2 | Choose and explain the reasoning behind selection of specific approaches to reliable sampling of environmental samples for pollutants |
| EOH 3 | Describe how principles of toxicodynamics and toxicokinetics come together to define human and mammalian toxicity following exposure to environmental chemicals |
| EOH 4 | Perform quantitative risk assessments of the hazards posed to human populations using recent modifications to the approaches originally developed by EPA and other regulatory agencies |
| EOH 5 | Explain the mechanisms by which chemical pollutants are transported throughout the environment and the natural processes by which they are ultimately eliminated (or not) |
| EOH 6 | Recommend methods for assessing chemical spills on-site for immediate intervention and management of clean-up operations |

CEPH MPH Foundational Competencies

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|--------|---|
| MPH 1 | Apply epidemiological methods to settings and situations in public health practice |
| MPH 2 | Select quantitative and qualitative data collection methods appropriate for a given public health context |
| MPH 3 | Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate |
| MPH 4 | Interpret results of data analysis for public health research, policy or practice |
| MPH 5 | Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings |
| MPH 6 | Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and systemic levels |
| MPH 7 | Assess population needs, assets, and capacities that affect communities' health |
| MPH 8 | Apply awareness of cultural values and practices to the design, implementation, or critique of public health policies or programs |
| MPH 9 | Design a population-based policy, program, project, or intervention |
| MPH 10 | Explain basic principles and tools of budget and resource management |
| MPH 11 | Select methods to evaluate public health programs |
| MPH 12 | Discuss the policy-making process, including the roles of ethics and evidence |
| MPH 13 | Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes |
| MPH 14 | Advocate for political, social, or economic policies and programs that will improve health in diverse populations |
| MPH 15 | Evaluate policies for their impact on public health and health equity |
| MPH 16 | Apply leadership and/or management principles to address a relevant issue |
| MPH 17 | Apply negotiation and mediation skills to address organizational or community challenges |
| MPH 18 | Select communication strategies for different audiences and sectors |
| MPH 19 | Communicate audience-appropriate (i.e., non-academic, non-peer audience) public health content, both in writing and through oral presentation |
| MPH 20 | Describe the importance of cultural competence in communicating public health content |
| MPH 21 | Integrate perspectives from other sectors and/or professions to promote and advance population health |
| MPH 22 | Apply a systems thinking tool to visually represent a public health issue in a format other than standard narrative |