

DOCTOR OF PHILOSOPHY IN THE FIELD OF ENVIRONMENTAL HEALTH (STEM)

Program Directors: Kate Applebaum, Kelvin Fong

The mission of the doctor of philosophy (PhD) in the field of environmental health program is to educate individuals focused on developing new knowledge in the methods or applications of environmental health sciences that translates to environmental public health policy and practice. Program scholars will advance knowledge in analysis and laboratory sciences.

Graduates can expect to be able to:

- Demonstrate skills across a wide range of epidemiologic and biostatistical theories and methods.
- Use knowledge in environmental public health risk sciences.
- Understand general and specialized concepts and methodologies for scientific research in environmental health.
- Understand and identify data that scientifically addresses environmental health disparity issues related to environmental justice, occupational exposures, and global inequities in exposures and susceptibilities.
- Demonstrate ability to work in interprofessional settings, such as in collaboration with quantitative, environmental, physical, and social scientists.
- Understand and abide by guidelines for ethical research practice and responsible conduct of research.
- Understand how to identify and appropriately work with communities from which research subjects are drawn and/or those who are most impacted by the conduct and results of the research.
- Conduct independent research, analyze data, and communicate results.
- Disseminate research findings to scientific and lay audiences.

This is a STEM designated program.

Visit the program website (<https://publichealth.gwu.edu/environmental-health-phd/>) for additional information.

ADMISSIONS

Visit the Milken Institute School of Public Health website (<https://publichealth.gwu.edu/>) for additional information about academic programs and information about GWSPH. Graduate admissions information, including application requirements and deadlines, can be found on the GWSPH Graduate Admissions website (<https://publichealth.gwu.edu/admissions/graduate-admissions/>).

REQUIREMENTS

The following requirements must be fulfilled: 48 total credits, including 8 credits in core foundational courses, 14 credits in

program-specific courses, 12 to 18 credits in elective courses, and 8 to 14 credits in proposal writing and dissertation research.

Code	Title	Credits
Required		
Core foundational courses (8 credits)		
PUBH 6080	Pathways to Public Health	
PUBH 6247	Epidemiologic Methods I: Design of Health Studies	
PUBH 6862	Applied Linear Regression Analysis for Public Health Research	
PUBH 8001	Doctor of Philosophy Seminar on Cross-Cutting Concepts in Public Health	
PUBH 8475	Research Ethics and Integrity in Domestic and International Research	
Program-specific courses (14 credits)		
PUBH 6121	Environmental and Occupational Epidemiology	
PUBH 8123	Applied Toxicology for Public Health	
PUBH 8126	Assessment and Control of Environmental Hazards	
PUBH 8144	Environmental Health Data Development and Modeling	
PUBH 8411	Advanced Topics: Principles of Human Health Risk Science	
Electives		
12 to 18 credits in elective courses, the selection of which is tailored to meet students' career goals and done in consultation with the advisor.		
Dissertation		
8 to 14 credits		
PUBH 8435	PhD Dissertation Proposal Development	
PUBH 8999	Dissertation Research (6 to 12 credits)	

Comprehensive examination

After completion of the course requirements, students take a comprehensive examination based on core courses. Upon successful completion of the examination, students officially enter the doctoral candidacy phase of the program.

Dissertation

Doctoral candidates prepare a written dissertation research proposal with guidance from their dissertation advisor and committee. Each doctoral candidate gives an oral presentation and defense to the committee who determines the student's readiness to commence the dissertation.

Doctoral candidates are required to conduct original research on a contemporary problem or issue. The dissertation includes at least one written manuscript and an oral presentation and defense.

Additional requirements for degree completion:

- Collaborative IRB Training Initiative (CITI) training requirement: All students must complete training regarding human subject protection regulation and the Health Insurance Portability and Accountability Act of 1996 (HIPAA). To fulfill this requirement, students must complete the CITI course in The Protection of Human Research Subjects.
- Integrity quiz and plagiarism requirement: Students must review the George Washington University Code of Academic Integrity (<https://students.gwu.edu/code-academic-integrity/>), take the quiz within their first semester of study, and ensure documentation is submitted to the SPH Office of Student Records.
- Professional enhancement requirement: Students must attend/participate in eight hours of epidemiology conferences. To be cleared for graduation, students must submit required documentation of applicable professional enhancement activities to the SPH Office of Student Records.
- Completion of a graduate teaching assistantship program certificate. See the GTAP website (<https://gradfellowships.gwu.edu/graduate-teaching-assistantship-program-gtap/>) for additional information.
- Grade-point average: A minimum program grade-point average of 3.0.
- Time limit: The degree must be completed within seven years of matriculation.

Additional information regarding School of Public Health doctoral programs is available on the SPH website (<https://publichealth.gwu.edu/academics/programs/doctoral/>).