Milken Institute School of Public Health THE GEORGE WASHINGTON UNIVERSITY	**Department of Environmental and Occupational Health** **PhD** **Environmental Health** **2026-2027** Note: All curriculum revisions will be updated immediately on the website http://www.publichealth.gwu.edu

Program Directors

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Mission

The mission of the Environmental Health PhD 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. Our scholars will advance knowledge in analysis and laboratory sciences.

Goals

The goals of the Environmental Health PhD program are to ensure that graduates:

1. Demonstrate skills across a wide range of epidemiologic and biostatistical theories and methods;
2. Utilize knowledge in environmental public health risk sciences;
3. Understand general and specialized concepts and methodologies for scientific research in environmental health;
4. Understand and identify data that scientifically addresses environmental health disparity issues related to environmental justice, occupational exposures and global inequities in exposures and susceptibilities;
5. Demonstrate ability to work in interprofessional settings, *e.g.,* in collaboration with quantitative, environmental, physical, and social scientists;
6. Understand and abide by guidelines for ethical research practice and responsible conduct of research;
7. 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;
8. Conduct independent research, analyze data, and communicate results;
9. Disseminate research findings to scientific and lay audiences.

Admissions Requirements

The Doctor of Philosophy Program is intended for professionals seeking to become public health researchers. Applicants who have completed an MPH degree from a Council of Education for Public Health (CEPH) accredited Program, or who hold a master's degree in a related field will be considered for admission to the PhD Program. Applicants may indicate their relevant training, work and/or research experience, or educational background that may have prepared them for doctoral level training in Public Health. As an accredited School of Public Health, the curriculum in all graduate academic programs must provide a foundation in public health. All graduate students without a prior degree from a CEPH-accredited program or school of public health will be required to successfully pass the zero-credit, free, online Pathways to Public Health (PUBH 6080) course within one year of matriculation. For the PhD, qualified applicants with degrees from institutions in foreign countries are also eligible for admission. Because admission to this program is highly selective, successful applicants should have competitive academic credentials and substantial prior public health professional work experience related to the specialty field to which they are applying.

Program Requirements
Students will complete this 48-credit program by taking Foundational Courses, Core Courses, Tailoring Courses, and credit hours focused on Proposal Writing and Dissertation Research. Students will also need to demonstrate advanced knowledge in the field by passing the comprehensive examination. The dissertation must be an original research project.

Competencies
Upon completion of the PhD in Environmental Health students will be able to:

- Plan and design assessments of environmental and/or occupational exposure prioritizing fate and transport phenomena
    - Courses: PUBH 8126, PUBH 8411, PUBH 8144

- Examine biological mechanisms involved in responding to environmental agents and factors that affect susceptibility to adverse effects
    - Courses: PUBH 8123, PUBH 6121

- Critique epidemiologic research investigating the relationship between environmental or occupational exposures and health, including summarizing methods and results and assessing biases
    - Course: PUBH 6121

- Apply principles of risk science and risk frameworks to environmental health issues, including recognizing strengths and weaknesses of risk management decision-making
    - Course: PUBH 8411

- Generate computational models applied to environmental and/or occupational health issues
    - Course: PUBH 8144

Graduation Requirements
All students accepted to this PhD program must follow the policies and regulations outlined in the GW Bulletin and the GWSPH Student Handbook. This includes, but is not limited to:

- Minimum Grade Point Average (GPA)
- Minimum Course Grades
- Continuous Enrollment
- Maximum Time to Degree
- Required Minimum Degree Credits
- Transfer Credit Policy
- CITI Training
- Integrity Quiz and Plagiarism
- Professional Enhancement (PE) Hours
- PUBH 6080 Pathways to Public Health
- Graduate Teaching Assistantship Program
- Comprehensive Examination
- Culminating Experience (Dissertation)

Milken Institute School of Public Health
THE GEORGE WASHINGTON UNIVERSITY

Department of Environmental and Occupational Health

PhD Environmental Health
2026 - 2027
Program-at-a-Glance

Required PhD Foundational Courses 8 Credits		
		Credits
PUBH 6080	Pathways to Public Health	0
PUBH 8475	Ethics in Domestic/International Research	1
PUBH 6862	Applied Linear Regression Analysis for Public Health	3
PUBH 6247	Epi Methods I: Design of Health Studies	3
PUBH 8001	PhD Seminar: Cross Cutting Concepts in Public Health	1

Required Core Courses 14 Credits		
		Credits
PUBH 8411	Advanced Topics – Principles of Environmental Health Risk Science	3
PUBH 8144	Computational and Systems Modeling	2
PUBH 6121	Environmental and Occupational Epidemiology	3
PUBH 8123	Applied Toxicology for Public Health	3
PUBH 8126	Assessment and Control of Environmental Hazards	3

Example Tailoring Courses 12-18 Credits *(all prerequisites apply)*		
		Credits
	Environmental Health	
PUBH 8116	Communicating Research Results	2
PUBH 8199*	TOPICS: Epidemiology Methods in Environmental Health Research	3
PUBH 8110	Research Rotation (students can do up to 3 rotations, each rotation is 2 credits)	2
PUBH 6128	Global Environmental and Occupational Health	2
PUBH 6130	Sustainable Energy and the Environment	2
PUBH 6133	Social Dimensions of Climate Change and Health	3
PUBH 6135	Researching Climate Change and Health	3
PUBH 6140	Global Climate Change and Air Pollution	2
	Microbiology and Molecular Studies	
PUBH 6127	Germs: Introduction to Environmental Health Microbiology	2
PUBH 6146	Microbiomes and Microbial Ecology in Public Health	2
PUBH 6238	Molecular Epidemiology	1
BMSC 8230	Molecular Basis of Human Disease	3
PUBH 6885	Computational Biology	3
PUBH 8878	Statistical Genetics	3
	Epidemiology	
PUBH 6252	Epi Methods II: Advanced Epidemiologic Methods	3
PUBH 8419	Measurement in Public Health and Health Services	3
PUBH 8416	Study Design and Evaluation Methods	3

PUBH 6863	Applied Meta-analysis	1
	Statistical Analysis	
PUBH 6865	Applied Categorical Analysis	3
PUBH 6864	Applied Survival Analysis	3
PUBH 6887	Applied Longitudinal Data Analysis	3
PUBH 6863	Applied Meta-analysis	1
PUBH 6879	Propensity Score Methods for Causal Inference in Observational Studies	3
PUBH 6850	Introduction to SAS for Public Health Research	1
PUBH 6851	Introduction to R for Public Health Research	1
PUBH 8366	Biostatistical Methods	3
EDUC 8173	Structural Equation Modeling	3
Proposal Writing and Dissertation Research 8-14 Credits		
PUBH 8435	PhD Proposal Development	2
PUBH 8999	EH Dissertation Research	(6-12)
Total		**48**

*new pilot course

Advising Notes

1. **Pathways to Public Health course (PUBH 6080).** As an accredited School of Public Health, curriculum in all graduate academic programs must provide a foundation in public health. If a student already holds a degree from a CEPH-accredited program or school of Public Health, this course will be waived. Otherwise, this zero-credit, free, online course should be completed within one year of matriculation.
2. **Tailoring courses.** Different tailoring courses may be considered. Discuss planned order of courses and selection of tailoring courses with advisors.
3. **Total credit hours.** The total credit hours earned toward the PhD is 48 credits. Students may take a minimum of 12 credit hours of Tailoring credits and then 14 credit hours in proposal writing and dissertation research (this includes the 2 credit hours of proposal writing). This may vary up to a maximum of 18 credit hours in Tailoring credits and then 8 credit hours in proposal and dissertation research.
4. **Comprehensive examination**. After completion of course requirements, students will take a comprehensive exam based on the core courses, typically at the end of the second year. Upon successful completion of the exam, students officially enter the doctoral candidacy phase of the program.
5. **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 public health problem or issue. The dissertation will consist of 3 academic manuscripts and the student gives an oral defense to the dissertation committee. One manuscript must be submitted to a peer-review journal prior to graduating.
6. **Graduation**. Degrees are awarded each semester, though formal commencement ceremonies, including the doctoral hooding ceremony, only occur in May. Students are eligible to participate in graduation activities only after they have completed all degree requirements and have no financial obligations to the University.