

PH.D. IN ENVIRONMENTAL HEALTH

This program provides graduate students with broad experience in environmental health. Our program is guided by the concepts and principles as delineated by the National Environmental Health Association, which defines environmental health as “the science and practice of preventing human injury and illness and promoting well-being by: identifying and evaluating environmental sources and hazardous agents and limiting exposures to hazardous physical, chemical, and biological agents in air, water, soil, food and other environmental media or settings that may adversely affect human health.” Recognizing that environments may also have beneficial impacts on communities, we also seek to understand the positive impact of built and natural environments on mental and physical health.

The flexible nature of this program allows students to design their graduate coursework to meet specific professional goals and will prepare students to work in a number of settings including public and private sectors as well as academia. Our goal is to provide students with critical analytic tools, subject-matter expertise, and problem-solving skills to be at the forefront of leadership and scholarship in the field of environmental health.

As an inherently multidisciplinary field, our PhD program strives to have students have broad exposure to the core sciences/pillars in environmental health (epidemiology, toxicology, exposure assessment, and policy) to be successfully collaborate and work across the field, while allowing students to pursue a depth of knowledge in a specific subject matter area that are required of all doctoral programs.

Learning Objectives

- 1) Evaluate, qualitatively and quantitatively, risks of exposures emanating from built and natural environments of public health concern.
- 2) Anticipate emerging environmental health issues.
- 3) Assess health impacts of environmental exposures.
- 4) Design and develop control and remediation strategies to mitigate environmental hazards.
- 5) Implement management strategies for achieving programmatic goals in environmental health.
- 6) Develop strategies to obtain compliance within an environmental health regulatory framework.
- 7) Communicate environmental risk to technical and lay populations.

Requirements Effective Fall 2023

Code	Title	Credits
Core Requirements:		
CIVE 526	Pollution, Exposure, and the Environment	3
Select one group from the following:		3
Group A:		
ERHS 502	Fundamentals of Toxicology	
Group B:		

ERHS 503	Toxicology Principles	
ERHS 504	Occupational and Environmental Toxicology	
ERHS 520	Environmental and Occupational Health Issues	3
ERHS 532	Epidemiologic Methods	3
ERHS 560	Health Impact Assessment	2
GRAD 544	Ethical Conduct of Research	1
PPA 555	Environmental Law and Policy	3
STAR 511	Design and Data Analysis for Researchers I	4
Select a minimum of two courses from the following:		2-3
BIOM 750	Grant Proposal Writing and Reviewing	
GRAD 540	Graduate Research Communication	
GRAD 550	STEM Communication	
PBHL 696	Public Health Group Study	
Select a minimum of 4 credits from the following:		4
STAR 501	Data Wrangling/Visualization for Researchers	
STAR 502	Multivariate Analysis for Researchers	
STAR 512	Design and Data Analysis for Researchers II	
STAR 513	Regression Models for Researchers	
STAR 514	Experimental Design/Analysis for Researchers	
STAR 532	Mixed Models for Researchers	
STAR 534	Machine Learning for Researchers	
ERHS 799	Dissertation	12-18
Electives (500-level or above) ^{1,2}		32
Program Total Credits:		72-79

A minimum of 72 credits are required to complete this program.

¹ Students may apply an earned Master's degree for up to 30 credits toward the PhD requirements.

² Electives must be approved by the student's advisor and graduate committee.