

# ENVIRONMENTAL HEALTH SCIENCES, PHD

The PhD degree in the Environmental Health Sciences Department is an advanced research degree that prepares students to employ laboratory and community approaches to address adverse environmental health impacts. Students use basic and applied research methodologies to examine consequences of chemical and non-chemical stressors and disasters. Graduates of the PhD programs advance to careers at academic institutions, governmental agencies, industry and nonprofit organizations.

## Program Competencies:

- Evaluate current challenges to environmental health through an exploration of the current literature and scientific evidence.
- Construct approaches and solutions to environmental health problems.
- Investigate contemporary challenges in environmental health sciences.
- Design teaching and learning experiences grounded in pedagogical best practices in a chosen area of expertise.
- Develop a grant proposal for a public health research study with a compelling scientific narrative, description of investigator capacity, timeline, and budget.

## Requirements

Students must complete 48 credit hours of coursework and doctoral studies beyond the baccalaureate, with a minimum of 30 didactic hours at Tulane in the doctoral program. Up to 18 Credits can be transferred from a prior graduate degree.

The PhD must be completed within seven years of matriculation into the doctoral program.

Course ID	Title	Credits
<b>PhD Foundational Courses</b>		
SPHL 6020	Foundations in Public Health	3
SPHL 6050	Biostatistics for Public Health	3
SPHL 6060	Epidemiology for Public Health	3
ENHS 6030	Survey of Environmental Health	3
ENHS 6600	Principles of Toxicology	3
ENHS 7620	Health Risk Assessment	3
<b>PhD Core Courses</b>		
ENHS 8100	Advanced Environmental Health	3
ENHS 8200	Environmental Health Methods	3
BIOS 6040	Intermediate Biostatistics	3
EPID 7120	Epidemiologic Methods II	3
SPHL 8080	Public Health Pedagogy	3
SPHL 7500	Public Health Grant Writing	3
<b>Electives</b> <sup>1</sup>		<b>12</b>
<b>Total Credit Hours</b>		<b>48</b>

<sup>1</sup> Select 12 credits of Environmental Health Sciences and other relevant elective courses at the 6000 or higher level. Students should choose these courses in consultation with their faculty advisor.

## Research Ethics

Students are required to take online research ethics training via CITI or another equivalent training program in research ethics. This certification must remain current throughout the program duration.

## Teaching Assistant Requirement

All PhD students at SPHTM are required to serve as a teaching assistant (TA) for two SPHTM courses while enrolled in the PhD program. Students should register for Teaching Assistantship Educational Experience (0 credits) during the terms they complete each TA requirement.

## **Comprehensive Exam**

The departmental faculty administer the comprehensive examination. The exam should be taken no later than a year after completing all required coursework. The comprehensive exam is offered in January, August, or by special arrangement. The exam consists of written questions from the faculty that gauge the student's ability to identify, assess, and propose approaches to study environmental health problems.

Students have two attempts to pass the examination; the second attempt must take place within a year of the first.

## **Doctoral Committee**

After successful completion of the comprehensive examination, the student forms a dissertation committee and develops a prospectus. The committee must include a minimum of three members with at least two faculty from the Department of Global Environmental Health Sciences and one external to the school.

## **Prospectus**

Students work with their advisor and doctoral committee to determine a research hypothesis and prepare a prospectus of proposed dissertation research. The research prospectus is presented and defended at least one semester before the dissertation defense. Following the successful defense of the prospectus, students are admitted to PhD candidacy and proceed with dissertation research.

## **Dissertation**

Students must conduct original research and defend a dissertation based on that research. The dissertation research demonstrates scholarly work and is the basis for the dissertation. The student defends the dissertation to their committee; the dissertation committee and SPHTM Executive Faculty approve the dissertation.