

# Occupational and Environmental Health, PhD

A PhD in occupational and environmental health (OEH) is an advanced research degree that emphasizes depth of knowledge and original research skills. The degree is designed to develop leaders in environmental and occupational health research and practice.

Students work with their faculty advisor to design a specialized curriculum of coursework and research projects in the following areas: agricultural safety and health, environmental health, environmental toxicology, ergonomics, industrial hygiene, and occupational injury prevention.

## Learning Outcomes

In addition to mastering the learning outcomes for the MS in occupational and environmental health, PhD students will:

- develop a proposal for grant funding;
- use appropriate analytic methods to interpret data relevant to the field of occupational and environmental health;
- develop a plan to communicate research findings to various audiences;
- design a research study in the field of occupational and environmental health; and
- evaluate the strengths and limitations of peer-reviewed studies in the field of occupational and environmental health.

## Requirements

The Doctor of Philosophy program in occupational and environmental health requires 72 s.h. of graduate credit. All students must complete a dissertation.

The Doctor of Philosophy in occupational and environmental health requires the following coursework.

## Required Courses

Students may use a course only once to fulfill a requirement.

Course #	Title	Hours
All of these:		
OEH:4240	Global Environmental Health	3
OEH:5010	Occupational and Environmental Health Seminar (taken three times, twice for 0 s.h. and once for 1 s.h.)	1
OEH:5620	Occupational Health	3
OEH:7060	Research Design in Occupational and Environmental Health	3
OEH:7070	Interpreting Occupational and Environmental Health Research	3
BIOS:4120	Introduction to Biostatistics	3
EPID:4400	Epidemiology I: Principles	3
CPH:6100	Essentials of Public Health	2

CPH:7270	Principles of Scholarly Integrity: Public Health (taken twice, once for 0 s.h. and once for 1 s.h.)	1
One of these:		
OEH:6460	Quantitative Exposure Assessment: Study Design and Evaluation	1,3
OEH:6520	Injury Epidemiology	3
At least 9 s.h. from these:		
OEH:6110	Rural Health and Agricultural Medicine	3
OEH:6420	Methods in Exposure Science	3
OEH:6431	Assessing Noise Hazards	1
OEH:6432	Assessing Nonionizing Radiation Hazards	1
OEH:6433	Assessing Ionizing Radiation Hazards	1
OEH:6440	Control of Occupational Hazards	3
OEH:6450	Aerosol Technology	3
OEH:6460	Quantitative Exposure Assessment: Study Design and Evaluation	3
OEH:6520	Injury Epidemiology	3
OEH:6710	Human Toxicology and Risk Assessment	3
OEH:6720	Advanced Toxicology	4
BIOS:5120	Regression Modeling and ANOVA in the Health Sciences	3
BIOS:5130	Applied Categorical Data Analysis	3
BIOS:6310	Introductory Longitudinal Data Analysis	3
EPID:6400	Epidemiology II: Advanced Methods	4
STAT:6516	Design of Experiments	3

## Electives

Students must earn a minimum of 18 s.h. in non-research-related courses, including classroom courses or equivalent web-based courses. Students work with their advisor to select courses appropriate for their professional goals.

## Research Credit

Students earn the remaining credit for the PhD by completing any combination of the following courses or other classroom courses. All students must complete a dissertation.

Course #	Title	Hours
OEH:7000	Thesis/Dissertation	arr.
OEH:7020	Independent Study in Occupational and Environmental Health	arr.

## Admission

Applicants must apply through the Schools of Public Health Application Service (SOPHAS); they also must apply for admission to the Graduate College through University

of Iowa Admissions. For detailed application information and admission requirements, visit the How to Apply to Occupational and Environmental Health on the department's website.

The occupational and environmental health faculty takes several factors into consideration when evaluating applications for admission, including grade-point averages, letters of recommendation, intent and motivation for graduate study, and research interests. Students with deficiencies in one area may be admitted if all other components of their application are very strong.

PhD applicants must hold a bachelor's degree and have a cumulative grade-point average of at least 3.25. Completion of a master's program before beginning PhD study is recommended.

Students may enter in the fall. May 1 is the final application deadline.

## Career Advancement

The program prepares students for professional and academic careers in environmental and occupational health. Graduates will be qualified for a career in a range of private, public, and academic positions; consulting firms; state and federal occupational and environmental agencies; chemical and consumer products areas; pharmaceutical industries; and universities.

## Academic Plans

### Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

### Occupational and Environmental Health, PhD

Course	Title	Hours
<b>Academic Career</b>		
<b>Any Semester</b>		
72 s.h. must be graduate level coursework; up to 33 s.h. of graduate transfer credits allowed upon approval. More information is included in the General Catalog and on department website. <sup>a</sup>		
Required courses listed below may be waived if already taken at the graduate level. Course waivers do not reduce the total number of s.h. required for the degree. Students should work with their advisor to select appropriate elective course(s) to replace the s.h. needed to reach 72 s.h.		
Maintain at least a 3.00 cumulative GPA.		
<b>Hours</b>		<b>0</b>
<b>First Year</b>		
<b>Fall</b>		
OEH:4240	Global Environmental Health	3
OEH:5620	Occupational Health	3
OEH:5010	Occupational and Environmental Health Seminar <sup>b</sup>	0
EPID:4400	Epidemiology I: Principles	3
CPH:6100	Essentials of Public Health <sup>c</sup>	2

CPH:7270	Principles of Scholarly Integrity: Public Health <sup>d</sup>	0
<b>Hours</b>		<b>11</b>
<b>Spring</b>		
BIOS:4120	Introduction to Biostatistics	3
OEH:5010	Occupational and Environmental Health Seminar <sup>b</sup>	0
CPH:7270	Principles of Scholarly Integrity: Public Health <sup>d</sup>	1
Required Selective course <sup>e</sup>		3
Elective course <sup>f</sup>		3
Elective course <sup>f</sup>		3
<b>Hours</b>		<b>13</b>
<b>Second Year</b>		
<b>Any Semester</b>		
Preliminary Assessment <sup>g</sup>		0
<b>Hours</b>		<b>0</b>
<b>Fall</b>		
OEH:6460	Quantitative Exposure Assessment; Study Design and Evaluation <sup>h</sup>	3
OEH:7070	Interpreting Occupational and Environmental Health Research	3
Required Selective course <sup>e</sup>		3
Elective course <sup>f</sup>		3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
OEH:5010	Occupational and Environmental Health Seminar <sup>b</sup>	1
OEH:7060	Research Design in Occupational and Environmental Health	3
Required Selective course <sup>e</sup>		3
Elective course <sup>f</sup>		3
Elective course <sup>f</sup>		3
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Any Semester</b>		
Proposal Review <sup>i</sup>		0
Exam: Doctoral Comprehensive Exam <sup>j</sup>		0
<b>Hours</b>		<b>0</b>
<b>Fall</b>		
Elective course <sup>f</sup>		3
OEH:7000	Thesis/Dissertation <sup>k</sup>	9
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
OEH:7000	Thesis/Dissertation <sup>k</sup>	9
<b>Hours</b>		<b>9</b>
<b>Fourth Year</b>		
<b>Fall</b>		
OEH:7000	Thesis/Dissertation <sup>k</sup>	1
<b>Hours</b>		<b>1</b>
<b>Spring</b>		
OEH:7000	Thesis/Dissertation <sup>k</sup>	1
Exam: Doctoral Final Exam <sup>l</sup>		1
<b>Hours</b>		<b>1</b>
<b>Total Hours</b>		<b>72</b>

- a Students must complete specific requirements in the University of Iowa Graduate College after program admission. Refer to the Graduate College website and the Manual of Rules and Regulations for more information.
- b Complete OEH:5010 three times, twice for 0 s.h. and then once for 1 s.h.
- c Take during the first semester of the program; not required if student has earned an MPH degree.
- d Complete CPH:7270 twice, first for 0 s.h. and then for 1 s.h.
- e See the General Catalog for list of approved courses; work with faculty advisor to determine appropriate graduate coursework and sequence.
- f Students must earn a minimum of 18 s.h. in non-research-related courses, including classroom courses or equivalent web-based courses. Students work with their advisor to select courses appropriate for their professional goals.
- g Complete by the end of the third semester.
- h Or take OEH:6520 during second year spring semester.
- i Complete prior to semester in which the dissertation defense takes place.
- j Consists of a written and oral component; complete by the end of the fifth semester.
- k Research credits may also be earned by taking any combination of OEH:7000, OEH:7020, and additional classroom courses. Work with faculty advisor to determine appropriate coursework and sequence.
- l Dissertation defense.