

# Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

## Department of Environmental and Occupational Health

### Doctor of Public Health Environmental and Occupational Health 2018

Note: All curriculum revisions will be updated immediately on the website  
<http://publichealth.gwu.edu/>

#### **Program Director**

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#### **Mission**

The mission of the Department of Environmental and Occupational Health (EOH) is to increase the body of knowledge that addresses the adverse health effects of environmental and occupational exposures; to disseminate knowledge through the education of students and health practitioners; and to apply that knowledge in the clinical, environmental, and workplace settings.

#### **Goal**

The goal of the EOH DrPH program is to prepare students for advanced level professional work in research, policy, and program design and administration in the field of Environmental and Occupational Health.

#### **Admissions Requirements**

The Doctor of Public Health Program is designed for mid-career professionals seeking to become public health leaders. Applicants who have completed an MPH degree from a Council of Education for Public Health (CEPH) accredited program are strongly preferred for admission to the DrPH Program. Alternatively, applicants with a master's degree in another field may indicate their relevant training, research experience, or educational background comparable to the MPH. Doctoral applicants admitted without an MPH will be required to take additional course work at the graduate level that does not apply toward the minimum 48 credits required for the DrPH. Qualified applicants with degrees from institutions in foreign countries are also eligible for admission. All applicants must submit scores from the Graduate Record Exam (GRE) taken within five years of the date of application. Because admission to this program is highly selective, successful applicants have competitive academic credentials and substantial prior public health professional work experience related to the specialty field to which they are applying.

#### **Competencies**

The Doctor of Public Health (DrPH) Program prepares professionals to assume national and international leadership positions in environmental and occupational health, global health, health behavior, and health policy. The field of public health provides unique insights into the complex interrelationships between health, politics, and human development. It enables professionals to address public health issues by marshalling research and analytic skills to develop innovative approaches to understand health and to promote and advocate for improved health outcomes. Upon completion of the DrPH, students in all programs will demonstrate ability in the core competencies listed at the end of this document.

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## Doctor of Public Health Environmental and Occupational Health

Program of Study  
2018

### Course Distribution Summary

- Total Credits = Minimum 48
- Required Foundation Courses and Research Methods = 22 credits
- Required Specialty Field Courses = 6 credits
- Specialty Field Electives = 7-10 credits
- Professional Leadership = 2 credits
- Dissertation Preparation and Dissertation = 8 to 11 credits

### REQUIRED FOUNDATIONAL AND RESEARCH METHODS COURSES 22 CREDITS

UNDER CERTAIN CIRCUMSTANCES AND WITH ADVANCE APPROVAL OF THE PROGRAM DIRECTOR, ANOTHER METHODS COURSE MAY BE SUBSTITUTED FOR PUBH 8417, 8418, OR 8420.

Course	Title	Credits	Semester Taken/ Proposed
PUBH 8401	Foundations of Public Health Leadership and Practice – Doctoral Seminar	3	Fall Year 1
PUBH 8402	Leadership and Decision Making: A Skills Based Approach	2	Summer Year 1
PUBH 8416	Study Design and Evaluation	3	Fall Year 1
PUBH 8417	Qualitative Research Methods and Analysis <i>Prereq: PUBH 8416</i>	3	Spring Year 1
PUBH 8418	Applied Statistical Analysis <i>Prereq: PUBH 8416</i>	3	Spring Year 1
PUBH 8419	Measurement in Public Health and Health Services Research <i>Prereq: PUBH 8418</i>	3	Spring Year 2
PUBH 8420	Advanced Analysis and Dissemination <i>Prereq: PUBH 8418, PUBH 8417</i>	3	Fall Year 2
PUBH 8403	Leadership in Public Health Practice and Policy	2	Fall Year 3

### REQUIRED SPECIALTY FIELD COURSES 6 CREDITS

Course	Title	Credits	Semester Taken/ Proposed
PUBH 8411	Advanced Topics – Principles of Environmental Health Risk Science – Doctoral Seminar <i>Prereq: PUBH 6121, 6123, 6126 or equivalent</i>	3	Year 1 or Year 2
PUBH 8412	Advanced Topics – Environmental and Occupational Health Research and Practice <i>Prereq: PUBH 6122 or equivalent</i>	3	Year 1 or Year 2

### SPECIALTY FIELD ELECTIVE COURSES 7-10 CREDITS (SUGGESTED OPTIONS)

Course	Title	Credits	Semester Taken/ Proposed
PUBH 6121	Environmental and Occupational Epidemiology	3	

PUBH 6122	Protecting Public Health and the Environment: Policies, Politics, Programs	3	
PUBH 6123	Toxicology: Applications for Public Health Policy	3	
PUBH 6124	Problem Solving in Environmental and Occupational Health	3	
PUBH 6125	Introduction to Children's Health and the Environment	2	
PUBH 6126	Assessment and Control of Environmental Hazards	3	
PUBH 6127	Applied Environmental Health Microbiology	2	
PUBH 6128	Global Environmental and Occupational Health	2	
PUBH 6130	Sustainable Energy the Environment	2	
PUBH 6199	Topics: Microbial Risk Assessment	1	
PUBH 6199	Topics: Pesticide Exposures and Cancer	1	
PUBH 6199	Topics: Food and the Global Environment	1	
	Other GW graduate level courses	varies	

**PROFESSIONAL LEADERSHIP COURSES**

2 CREDITS

*(most students will take 2 credits Instructional Leadership)*

<b>Course</b>	<b>Title</b>	<b>Credits</b>	<b>Semester Taken / Proposed</b>	<b>Instructor/Class TA'd</b>
PUBH 8413	Research Leadership	Varies		
PUBH 8415	Instructional Leadership	Varies		

**COMPREHENSIVE EXAM**

*(TAKEN UPON COMPLETION OF ALL COURSE WORK)*

COMPREHENSIVE EXAMINATION                      DATE TAKEN \_\_\_\_\_                      PASS/NO PASS \_\_\_\_\_

**DISSERTATION PREPARATION AND DISSERTATION**

8 TO 11 CREDITS

PUBH 8422 IS REQUIRED

<b>Course</b>	<b>Title</b>	<b>Credits</b>	<b>Semester Taken/ Proposed</b>
PUBH 8422	Advanced Health Care and Public Health Research Design- <i>Prerequisites: Pass Comprehensive Exam, Approval of Program Director, &amp; One page abstract</i>	2 required	Fall Year 3
PUBH 8423	Dissertation Research DrPH Degree Dissertation Research <i>Prereq: PUBH 8422</i>	6 to 9 required	Multiple – may be taken in increments of 1 to 9 credits

**TOTAL PROGRAM**

**48 CREDITS**

**PROFESSIONAL ENHANCEMENT EXPERIENCES**

8 CLOCK HOURS

<b>Activity</b>	<b>Date</b>	<b>Hours</b>

**Course Descriptions may be found here:** <http://publichealth.gwu.edu/academics/courses>

## DrPH Core Competencies-2018

### Doctor of Public Health

revised this page 7/27/16

I=Introduced D=Developed M= Mastered

	PUBH 8401	PUBH 8402	PUBH 8403	PUBH 8404	PUBH 8405	PUBH 8406	PUBH 8407	PUBH 8408	PUBH 8409	PUBH 8411	PUBH 8412	PUBH 8416	PUBH 8417	PUBH 8418	PUBH 8419	PUBH 8420	PUBH 8422	PUBH 8423
<b>Program Specific Competencies</b>																		
<b>DrPH Core Competencies</b>																		
Analyze a public health problem and determine appropriate sources of data and methods for problem identification, program planning, implementation, monitoring, and evaluation.	D	D	D			D	M	M	M			D	D	D	D	D	M	M
Develop and analyze hypotheses and research propositions that can be tested by appropriate quantitative or qualitative research designs and methodologies.				D	D	D	M	M	M			D	D	D	D	D	M	M
Evaluate research tools including research design, statistical analysis data collection instruments and measurement systems.				D		D	D	D	D			D	D	D	D	D	M	M
Apply epidemiological and biostatistical techniques to studies designed to assure effective practice and policy decision-making in a field within public health. Students will possess epidemiological and biostatistical concepts/techniques necessary to successfully analyze and apply the results to epidemiological research to making and implementing												D		D	D	D	M	M
Design and conduct a qualitative study using appropriate theory and methods.													D					
Synthesize and evaluate research conducted by others.	I			M		I	D			D		M	M		D	M	M	M
Design strategies to accurately and effectively describe public health, economic, administrative, legal, social, political, and cultural implications of different health policy options.	I			D	D	D	D	M	D	D	I	D	D	D	D	D	D	M
Present public health data and research syntheses to scientific and professional audiences and the public.		D	D	M		D	D	M	I	I	I	D	D	D		D	D	M
Defend the feasibility and expected outcomes of different policy options and transform them into organizations, plans, processes, and programs.	I	D	D			D	D					D				M	D	M
Appraise the dynamic forces that contribute to cultural diversity and develop responsive plans and programs.		I	D			D	D	D	I			D		D				
Assess the determinants of health and illness, factors that contribute to health promotion and disease prevention, and factors that influence the use and cost of public health services in a population.	D			D		D	D	D	M			D				M	D	M
Describe the theory of organizational structure and its relation to professional practice.		D	D	D								I						
Support a culture of ethical standards of conduct in the research process and within organizations and communities.		I	D	I		D	D					D	D		D	M	D	M
Lead a team of diverse professionals reflecting shared values and vision to achieve specific objectives.		D	D						M			D						

### **Program-Specific Competencies**

On completion of the DrPH Program in Environmental and Occupational Health, students will possess the following functional competencies and subject area knowledge:

- Appropriately apply the fundamental principles of epidemiology, biostatistics, toxicology and exposure assessment, in the comprehensive identification, characterization and assessment of environmental and occupational health risk. Relevant Courses: PubH 6121, 6123, 6124, 6126, 8411, 8412, 8416, 8417, 8418, 8420, 8422, 8423
- Appropriately apply the fundamental principles of epidemiology, biostatistics, toxicology, exposure assessment, risk assessment and risk communication in developing and implementing comprehensive strategies for the management of environmental and occupational health risk, incorporating the issues associated with the political, social and economic context in which the risk occurs. Relevant Courses: PubH 6121, 6123, 6124, 6126, 8411, 8412, 8414, 8416, 8417, 8418, 8420, 8422, 8423
- Successfully manage an interdisciplinary team of professionals in accomplishing risk analysis (including risk assessment, risk communication and risk management). Relevant Courses: PubH 6122, 6124, 8401, 8402, 8411, 8412, 8414
- Critically assess the basis for the development and implementation of environmental and occupational health policy in the face of inevitable scientific uncertainty, taking into account science and technology, law, politics, economics and human values. Relevant Courses: PubH 6122, 6124, 8401, 8402, 8411, 8412, 8423
- Evaluate the success of environmental and occupational health programs for accomplishing risk analysis objectives. Relevant Courses: PubH 6124, 6126, 8401, 8402, 8411, 8416, 8417, 8418, 8419, 8420, 8422, 8423

### **Program Policies and Procedures**

For program policies and procedures, please refer to the Doctor of Public Health Handbook and other resources, located at <http://publichealth.gwu.edu/>.

## DrPH Graduation Requirements

### Graduation

While degrees are awarded at the end of each semester, formal commencement ceremonies occur only in May, including the doctoral hooding ceremony. Students are eligible to participate in graduation activities only after they have completed all degree requirements and have no financial obligations to the University. Students may include DrPH designation after their name upon completion of all degree requirements.

### Graduation Requirements

1. Credits: Successful completion of 48 credits.
2. Curriculum: Successful completion of the foundational, research methods, program-specific specialty field, and professional leadership courses.
3. Comprehensive examination: Once the course of study is completed, students are required to pass the comprehensive exam to be officially admitted to the candidacy phase.
4. Dissertation: [PUBH 8422](#) Advanced Health Care and Public Health Research Design plus 6 to 9 credits in dissertation research are required. Once the proposal has been successfully defended and the dissertation research credit requirement has been met, the oral defense may be scheduled.
5. Grade point average: A minimum overall grade-point average of *B* (3.0).
6. Time limit: The degree must be completed within seven years of matriculation.
7. CITI Training requirement: All students are required to complete training regarding human subject protection regulation and the Health Insurance Portability and Accountability Act of 1996 (HIPAA). To fulfill this requirement, you must complete the Collaborative IRB Training Initiative (CITI) Course in The Protection of Human Research Subjects.
8. Integrity Quiz & Plagiarism requirement: All students are required to review the George Washington University Code of Academic Integrity, take the quiz within their first semester of study, and ensure documentation is submitted to the SPH Office of Student Records..
9. Professional Enhancement requirement: Students must participate in 8 hours per degree program of advisor pre-approved Public Health-related lectures, seminars, and symposia, related to the appropriate field of study. Students must submit documentation of Professional Enhancement activities to the SPH Office of Student Records.

*Note: no transfer credits are accepted.*