

## **2023-2024 Curriculum Guide for Master of Public Health degree program with a specialization in ENVIRONMENTAL HEALTH SCIENCES**

The Master of Public Health (MPH) degree program is designed to provide students with the knowledge and skills for general and specialized applied public health practice, both in the public sector and in private sector careers related to population health as environmental health specialists. It includes courses within public health's foundation disciplines of biostatistics, environmental health science, epidemiology, health behavior & health promotion, and health services management and policy. This broad training is complemented by the more in-depth course work within the specialization including an applied practice experience and integrative learning experience.

Students admitted to the MPH degree program are assigned a faculty advisor who will provide guidance throughout the program. This document serves as a resource to be used by the student and the advisor in planning a program with a specialization in Environmental Health Sciences (EHS), but is not inclusive of all important degree, college, and university requirements. This is not considered an on-line degree program; however, students will enroll in a combination of courses designed for on-campus in-person delivery (IP), distance learning (DL), or hybrid (HY). All students are expected to be familiar with the College of Public Health (CPH) *Graduate Student Handbook*: <http://cph.osu.edu/students/graduate/handbooks>, the *Graduate School Handbook* <https://gradsch.osu.edu/handbook> and the CPH competencies: <http://go.osu.edu/cphcompetencies>.

### **PROGRAM OF STUDY**

The MPH-EHS curriculum consists of a minimum of 45 credit hours organized into five curricular domains:

1. MPH Integrated Foundational curriculum including the Buck-IPE\* (12 credit hours)
2. EHS Specialization courses (22 credit hours)
3. Approved Electives (6 credit hours)
4. Applied Practice Experience (2 credit hours)
5. Integrative Learning Experience (3 credit hours)

\*In addition to credit hour requirements, The Ohio State University College of Public Health requires all Master of Public Health students to participate in interprofessional practice and education activities. To meet this requirement, first-year students will participate in Buck-IPE, a longitudinal curriculum for students in health science and allied health professional programs at The Ohio State University. Information about participation and assessment will be shared with MPH students as part of the Integrated Foundational Curriculum (in PUBHLTH 6002 and 6004).

### **MPH Integrated Foundational curriculum (12 credit hours)**

Every student in the MPH-EHS program must take the following MPH Integrated Foundational curriculum:

PUBHTLH 6001	Methods in Quantitative Data Analysis	4 credit hrs
PUBHLTH 6002	History, Values and Essential Services of the U.S. Public Health System	2 credit hrs
PUBHLTH 6003	Methods in Public Health Planning and Evaluation	2 credit hrs
PUBHLTH 6004	Foundations of Health Systems and Policy with Applied Integrative Lab	4 credit hrs

### **Required Courses in the EHS Specialization (22 credit hours)**

PUBHEHS 5315	Principles of Toxicology	3 credit hrs
PUBHEHS 5325	Principles of Occupational Health Science	3 credit hrs
PUBHEHS 6310	Principles of Environmental Health Science	3 credit hrs
PUBHEHS 6320	Global Health and Environmental Microbiology	3 credit hrs
PUBHEHS 6390	Major Human Diseases in Global Public Health	3 credit hrs
PUBHEHS 7365	Environmental and Human Health Risk Assessment	3 credit hrs
PUBHEHS 7380	Exposure Science Monitoring Techniques	3 credit hrs
ENVSCI 7899	Current Issues in Environmental Sciences	1 credit hr

**Electives (Choose courses to bring the total credit hours in the program to 45 credit hours)**

Additional electives may be selected from other courses offered by the EHS Division, by the College of Public of Health, or elsewhere in the University with approval of the advisor. Other Division of EHS courses and the following are examples:

PUBHEHS 5335	Ecology of Infectious Diseases	3 credit hrs
PUBHEHS 5340	Air Contaminants and Public Health	3 credit hrs
PUBHEHS 5345	Modeling Transmission & Control of Infectious Diseases	3 credit hrs
PUBHEHS 5395	Engineering Design for Environmental Health	3 credit hrs
PUBHEHS 6325	Climate Change and Human Health	3 credit hrs
PUBHEHS 6330	Environmental Epigenetics	3 credit hrs
PUBHEHS 6340	Molecular Techniques for Environmental Health Sciences	3 credit hrs
PUBHEHS 7193	Individual Studies in Environmental Health Sciences	1-4 credit hrs
PUBHEHS 7360	Water Contamination: Sources and Health Impact	3 credit hrs
PUBHEHS 7375	Quantitative Microbial Risk Analysis Modeling	3 credit hrs
PUBHEPI 7411	Epidemiology in Environmental Health	3 credit hrs
PUBHLTH 6189.01	Field Experience in Public Health	1-6 credit hrs
PUBHLTH 6189.02	Field Experience in Global Public Health	1-6 credit hrs
ENTMLGY 5605	Vector Biology and Vector Borne Disease	3 credit hrs

**Applied Practice Experience**

PUBHLTH 7189	Applied Practice Experience	2 credit hrs
--------------	-----------------------------	--------------

**Integrative Learning Experience**

PUBHLTH 7998	Integrative Learning Experience in Public Health	3 credit hrs
--------------	--	--------------

**Sample Curriculum Plan for the Master of Public Health in Environmental Health Sciences**

(THIS IS ONE OPTION, STUDENTS ARE ADVISED TO CONSULT WITH THEIR ADVISOR FOR OTHER OPTIONS)

TERM	COURSE	COURSE TITLE	CREDIT HRS	TERM(S) OFFERED	DELIVERY MODE
<b>Year 1 Autumn</b>	PUBHLTH 6001†	Methods in Quantitative Data Analysis	4	AU	DL
	PUBHLTH 6002†	History, Values and Essential Services of the U.S. Public Health System	2	AU	DL
	PUBHEHS 6310	Principles of Environmental Health Science	3	AU	DL
	PUBHEHS 6320	Global Health and Environmental Microbiology Design	3	AU	DL
<b>Year 1 Spring</b>	PUBHLTH 6003†	Methods in Public Health Planning and Evaluation	2	SP	DL
	PUBHLTH 6004†	Essentials of Population Health	4	SP	DL
	PUBHEHS 5315	Principles of Toxicology	3	SP	IP
	ELECTIVE		3	ANY	
	PUBHEHS 7365	Environmental and Human Health Risk Assessment	3	SP	IP
	ENVSCI 7899	Current Issues in Environmental Sciences	1	SP	IP
<b>Year 1 Summer</b>	PUBHLTH 7189	Applied Practice Experience	2	ANY	DL
<b>Year 2 Autumn</b>	PUBHEHS 5325	Principles of Occupational Health Science	3	AU	DL
	PUBHEHS 6390	Major Human Diseases in Global Public Health	3	AU	DL
	PUBHEHS 7380	Exposure Science Monitoring Techniques	3	AU	IP
	PUBHLTH 7998	Integrative Learning Experience in Public Health	3	ANY	
	ELECTIVE		3	ANY	

†PUBHLTH 6001-6004: The College of Public Health Office of Academic Programs and Student Services will enroll students in these courses.

**Grade Policy:**

In addition to the general Graduate School requirements of a cumulative grade point average of 3.0 or higher, students must meet specific college policies regarding grades in foundation and specialization courses. Students should familiarize themselves with Section 11 of the College of Public Health Graduate Student Handbook.

**College of Public Health - Office of Academic Programs and Student Services (OAPSS)**

OAPSS staff are available to provide assistance with College, Graduate School and University policies and procedures.

(614) 292-8350/100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/[cph.osu.edu](http://cph.osu.edu). Questions regarding the student’s program of study should be directed to their advisor.