

# Bachelor of Science in Public Health – Environmental Public Health Specialization/Master of Public Health – Environmental Health Sciences Combined (3+2) 2025-2026 Curriculum Guide

General Education Requirements		
Requirement	Course Options	Credit Hours
GE Launch Seminar	GENED 1201	1
Writing and Information Literacy	Student Choice	3
Mathematical and Quantitative Reasoning	Major prerequisite: MATH 1148 & 1149 or 1150* (or Student Choice – see below)	5-7
Literary, Visual and Performing Arts	Student Choice	3
Historical and Cultural Studies	Student Choice	3
Natural Sciences	Recommended: BIOLOGY 1101 or 1113.01 or 1113.02** (or Student Choice – see below)	4-5
Social and Behavioral Sciences	Student Choice	3
Race, Ethnicity and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse and Just World	Student Choice <sup>a</sup>	4-6
Theme: Student Choice	Student Choice <sup>a</sup>	4-6
GE Reflection	GENED 4001	1
	General Education Credit Hours:	34-41

<sup>\*</sup>Indicates a prerequisite course for this major that also satisfies this GE category. If a student makes an alternative selection in this GE category, they must also complete this course.

#### **Major Core Courses**

Course/Requirement	Title	Credit Hours
PUBHLTH 1100 or 1100H	Survey of Public Health	1
PUBHLTH 2010 or 2010H ◆	Critical Issues in Global Public Health	3
PUBHBIO 2210 or 2210H	Biostatistics for Public Health Research	3
PUBHEHS 3310♦	Current Issues in Global Environmental Health	3
PUBHEPI 2410♦	Epidemiology in Public Health	3
PUBHHBP 3510♦	Role of Behavior in Public Health	3
PUBHHMP 3610 ♦	U.S. and International Health Care	3
PUBHLTH 3180 or 3180E	Undergraduate Capstone Preparation	1
Capstone Experience (choose one)	PUBHLTH 3191/3191E Undergraduate Internship in Public Health PUBHLTH 3999 Undergraduate Capstone Research in Public Health PUBHLTH 4999 Undergraduate Research Thesis PUBHLTH 4999.01H Senior Honors Thesis PUBHLTH 3189.05: Field Experience in Global Public Health: Costa Rica EARTHSC 5797.20 Exploring Environmental and Human Health Issues in Japan (3 cr) Other pre-approved (by CPH) Education Abroad Experience	2-3
	Major Core Requirements:	22-23

#### **Specialization Courses**

Course/Requirement	Title	Credit Hours
EARTHSC 2203♦	Environmental Geoscience	3
EARTHSC 3411	Water Security for the 21 <sup>st</sup> Century (SP) (prereq: EARTHSCI 2245 or other GE data analysis course and sophomore standing)	3
PUBHEHS 3320	Fundamentals of Environmental Health Risk Assessment (SP)	3
PUBHEHS 4530	Food Safety & Public Health (SP) (prereq: MICROBIO 4000 or 4100)	3
PUBHEHS 5340	Air Contaminants & Public Health (SP)	3
PUBHEPI 3411♦	Public Health Field Investigation	3
Choose 1: EARTHSC 5203 EARTHSC 5663 PUBHEHS 4330	Environment Course: Geo-Environment & Human Health (prereq: EARTHSC 2245 or GE data analysis course) Global Change & Sustainability in the Earth System (4 cr) Environmental Epigenetics (prereq: BIOLOGY 1113 or 1114)	3-4
Environmental Public Health Electives	Choose 9 credit hours from list of courses on page 2. Cannot overlap with courses used to fulfill other major requirements.	9
	Specialization Requirements:	30-31

<sup>\*\*</sup>Indicates a prerequisite course for a major required course (MICROBIOLOGY 4000.01/4000.02) that also satisfies this GE category. If a student makes an alternative selection in this GE category, they must also complete this course.

<sup>&</sup>lt;sup>a</sup> Students must complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas. One course in each GE Theme area may double count in the GE and major hours. Major required courses that are also theme courses are identified with a ◆ symbol. Courses that can fulfill General Education requirements are listed at: <a href="https://classes.osu.edu">https://classes.osu.edu</a>

## **Specialization Supporting Courses**

Course	Title	Credit Hours
CHEM 1210	General Chemistry I (prereq: C- or above in MATH 1148/1149 or 1150)	5
CHEM 1220	General Chemistry II (prereq: CHEM 1210, C- or above in Math 1148 or above)	5
CHEM 2510	Organic Chemistry I (prereq: CHEM 1220, C- or above in Math 1148 or above)	4
CHEM 2540	Organic Chemistry Lab I (prereq: CHEM 1220, C- or above in Math 1148 or above)	2
MICROBIOLOGY 4000.01 or 4000.02	Basic and Practical Microbiology (prereq: GE Natural Science Biology course)	4
PHYSICS 1200	Mechanics, Kinematics, Fluids, Waves (prereq: MATH 1148/1149 or 1150)	5
	Specialization Non-Major Requirements:	25

#### **Environmental Public Health Electives**

Course/Requirement	Title	Credit Hours
EARTHSC 2204 ♦	Exploring Water Issues	3
EARTHSC 4450	Water, Ice, & Energy in the Earth System (prereq: EARTHSC 1100 or 2204 and CHEM 1210 or PHYSICS 1250)	3
EARTHSC 5203	Geo-Environment & Human Health (prereq: EARTHSC 2245 or GE data analysis course)	3
EARTHSC 5651	Hydrogeology (prereq: EARTHSCI 1100, 1105, 1121, 1151, 2203 or 2205 and Math 1152 or above)	4
EARTHSC 5663	Global Change & Sustainability in the Earth System	4
ENR 2100	Introduction to Environmental Science	3
ENR 3000	Soil Science	3
GEOG 2800	Our Global Environment	3
GEOG 5210	Fundamentals of GIS	3
PUBHLTH 3998	Undergraduate Public Health Research	2
PUBHLTH 5015	Public Health Data Analytics (prereq: PUBHBIO 2210 or 2210H)	3
PUBHEHS 3330	Global Pandemics and Public Health	3
PUBHEHS 4325◆	Climate Change, Sustainability and Human Health	3
PUBHEHS 4330	Environmental Epigenetics (prereq: BIOLOGY 1113 or 1114)	3
PUBHEHS 4340	Molecular Techniques for Environmental Health Sciences	3
PUBHEHS 5325	Principles of Occupational Health Science	3
PUBHEHS 5395	Engineering Design Environmental Health (prereq: MATH 1151 or 1161.01 or 1161.02, and CHEM 1210 or 1250)	3
PUBHEPI 5412	Global Epidemiology of Infectious Disease	3
VETPREV 5721	Introduction to Zoonoses (prereq: MICROBIO 4000)	2

#### Overlap between BSPH and MPH

Students in the combined degree program do not take PUBHEHS 5315 nor PUBHEHS 5335 at the undergraduate level

Course/Requirement	Title	Credit Hours
PUBHLTH 6001	Methods in Quantitative Data Analysis	4
PUBHLTH 6002	History, Values & Essential Services of the U.S. Public Health System	2
PUBHEHS 5325	Principles of Occupational Health Science	3
	Overlapping Courses	9

# Graduate courses unique to the Master of Public Health Degree with a specialization in Environmental Health Sciences

Course/Requirement	Title	Credit Hours
PUBHLTH 6003	Methods in Public Health Planning & Evaluation	2
PUBHLTH 6004	Essentials of Population Health	4
PUBHEHS 5315	Principles of Toxicology (SP)	3
PUBHEHS 5335	Ecology of Infectious Disease (SP)	3
PUBHEHS 6310	Principles of Environmental Health Science	3
PUBHEHS 6320	Global Health and Environmental Microbiology	3
PUBHEHS 6390	Major Human Diseases in Global Public Health	3
PUBHEHS 7365	Principles of Risk Assessment	3
PUBHEHS 7380	Exposure Science Monitoring Techniques I	3
ENVSCI 7899	Current Issues in Environmental Sciences	1
MPH-EHS Approved Elective	Select from pre-approved list**	3
PUBHLTH 7189	Applied Practice Experience	2
PUBHLTH 7998	Integrative Learning Experience for Public Health	3
	Total Minimum Unique Credit Hours for MPH Degree:	36

\*\*Pre-Approved List of MPH-EHS Electives

Course	Title	Credit Hours
PUBHEHS 5340	Air Contaminants and Public Health	3
PUBHEHS 5345	Modeling Transmission & Control of Infectious Diseases	3
PUBHEHS 5395	Engineering Design for Environmental Health	3
PUBHEHS 6325	Climate Change and Human Health	3
PUBHEHS 6330	Environmental Epigenetics	3
PUBHEHS 6340	Molecular Techniques for Environmental Health Sciences	3
PUBHEHS 7193	Individual Studies in Environmental Health Sciences	1-4
PUBHEHS 7360	Water Contamination: Sources and Health Impact	3
PUBHEHS 7375	Quantitative Microbial Risk Analysis Modeling	3
PUBHEHS 6382	Environmental Health Analytical Chemistry	3
PUBHEHS 7411	Epidemiology in Environmental Health	3
PUBHLTH 6189.01 or .02	Field Experience in Public Health/Field Experience in Global Public Health	1-6
ENTMLGY 5605	Vector Biology and Vector Borne Diseases	3

#### Policies and General Requirements for the BSPH/MPH Degree

- A minimum of 121 total credit hours for the standalone BSPH degree. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the minimum requirement for the BSPH degree.
- A minimum of 30 undergraduate credit hours earned through regular course enrollment at this University for the BSPH degree.
- A maximum of 8 hours of technical credit may be counted towards the BSPH degree requirements.
- A maximum of 4 credit hours of physical activity courses (all 1100-level KNSFHP courses except for 1102, 1103, 1122, and 1137).
- For the BSPH, a cumulative GPA of at least 2.5 on all coursework completed at The Ohio State University and a minimum of a 2.5 in the major.
- For the MPH, a minimum cumulative 3.0 GPA is required.
- A minimum grade of C- or higher is required for all undergraduate major courses.
- If a major-required course or major elective is a GE Theme course, two 3-4 credit hour courses (no more than one per theme area) are permitted to double count in the GE and major hours. GE Theme courses are indicated with a ◆ symbol.
- The program requirements that a student will follow are determined by their admit term, which is their first term of undergraduate enrollment (or graduate enrollment for their graduate career) at Ohio State.
- Students are expected to follow the rules and guidelines in both the undergraduate and graduate student handbooks in the College of Public Health.
- Courses that overlap between the degrees are indicated with a +. These are courses that the Office of Academic Programs and Student Services will register students for in order for them to double count between the degrees.

## Sample 5-year Plan

Term	Course	Credit Hours
Autumn 1	GE Writing and Information Literacy (ENGLISH 1110.0X)	3
(15-16 credit	MATH 1148 (4cr) or 1150 (5cr) (GE Math Quant Reasoning and Major prereq)	4 or 5
hours)	GE Historical and Cultural Studies	3
	PUBHLTH 1100	1
	PUBHLTH 2010	3
	GENED 1201 (GE Launch Seminar)	1
Spring 1	CHEM 1210	5
(18 credit hours)	PUBHEHS 3310	3
	MATH 1149 (If MATH 1148 was taken) or Env Public Health Elective #1	3
	PUBHEPI 2410	3
	BIOLOGY 1113.01 or .02 (GE Natural Science and Major course prereq)	4
Autumn 2	PUBHHMP 3610	3
(16 credit hours)	CHEM 1220	5
	PUBHHBP 3510	3
	PHYSICS 1200	5
Spring 2	CHEM 2510	4
(15-18 credit	CHEM 2540	2
hours)	PUBHBIO 2210 OR 2201H	3
	EARTHSCI 3411	3
	GE Social and Behavioral Science	3
	Environmental Public Health Elective #1(If not taken in SP of Year 1)	0-3
Autumn 3	MICROBIOLOGY 4000.01 OR .02	4
(16 credit hours)	GE Race, Ethnic and Gender Diversity	3
	EARTHSCI 2203	3
	PUBHEPI 3411	3
	Environment Course (select 1 of 3 options)	3
Spring 3	PUBHEHS 5340	3
(16 credit hours)	GE Literary, Visual & Performing Arts GE	3
	PUBHEHS 3320	3
	PUBHEHS 4530	3
	PUBHLTH 3180 (Capstone Prep)	1
	GE THEME: Health & Wellbeing OR Sustainability OR Lived Environment	3
Summer 3	Capstone Course (3191, 3999 or 4999)	2
(2 credit hours) Autumn 4	PUBHEHS 5325+	3
(18 credit hours)	Environmental Public Health Elective #2	3
(10 didditillodio)	PUBHEHS 6310	
	GE THEME: Citizenship #1	3
	PUBHLTH 6001+ PUBHLTH 6002+	4 2
Spring 4	PUBHLTH 6003	2
(17 credit hours)	PUBHLTH 6004	4
·	GE THEME: Citizenship #2	3
	PUBHEHS 5315	3
	Environmental Public Health Elective #3	3
	GENED 4001 (GE Reflection Seminar)	1

Term	Course	Credit Hours
Summer 4	PUBHLTH 7189	2
(2 credit hours)		
Autumn 5	PUBHEHS 7380	3
(12 credit hours)	PUBHEHS 6390	3
	PUBHEHS 6320	3
	MPH-EHS Approved Elective	3
Spring 5	PUBHEHS 5335	3
(9 credit hours)	PUBHEHS 7365	3
	PUBHLTH 7998	3
	Total Minimum Credit Hours* for Degree:	156-
	*Total Credit hours will vary depending on which courses students select	165