2022-2023 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 culminating 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. All students are expected to be familiar with the College of Public Health (CPH) Graduate Student Handbook: [http://cph.osu.edu/students/graduate/handbooks](http://cph.osu.edu/students/graduate/handbooks), the Graduate School Handbook [http://www.gradsch.ohio-state.edu/](http://www.gradsch.ohio-state.edu/) and the CPH competencies: [http://go.osu.edu/cphcompetencies](http://go.osu.edu/cphcompetencies).

PROGRAM OF STUDY

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

1. MPH Integrated Foundational curriculum (12 credits)
2. EHS Specialization courses (22 credits)
3. Approved Electives (6 credits)
4. Applied Practice Experience (2 credits)
5. Integrative Learning Experience (3 credits)

**MPH Integrated Foundational curriculum** (12 credits)

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBHTLH 6001</td>
<td>Methods in Quantitative Data Analysis</td>
<td>4</td>
</tr>
<tr>
<td>PUBHLTH 6002</td>
<td>History, Values and Essential Services of the U.S. Public Health System</td>
<td>2</td>
</tr>
<tr>
<td>PUBHLTH 6003</td>
<td>Methods in Public Health Planning and Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>PUBHLTH 6004</td>
<td>Foundations of Health Systems and Policy with Applied Integrative Lab</td>
<td>4</td>
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</table>

**Required Courses in the EHS Specialization** (22 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>PUBHEHS 5315</td>
<td>Principles of Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 5325</td>
<td>Principles of Occupational Health Science</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 6310</td>
<td>Principles of Environmental Health Science</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 6320</td>
<td>Global Health and Environmental Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 6390</td>
<td>Major Human Diseases in Global Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 7365</td>
<td>Environmental and Human Health Risk Assessment</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 7380</td>
<td>Exposure Science Monitoring Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ENVSCI 7899</td>
<td>Current Issues in Environmental Sciences</td>
<td>1</td>
</tr>
</tbody>
</table>

*****Questions regarding the student's program of study should be directed to their advisor*****
Electives (Choose courses to bring the total credits in the program to 45 credits)

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:

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>PUBHEHS 5335</td>
<td>Ecology of Infectious Diseases</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 5340</td>
<td>Air Contaminants and Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 5345</td>
<td>Modeling Transmission &amp; Control of Infectious Diseases in Humans &amp; Animals</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 5395</td>
<td>Engineering Design for Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 6325</td>
<td>Climate Change and Human Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 6330</td>
<td>Environmental Epigenetics</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 6340</td>
<td>Molecular Techniques for Environmental Health Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEHS 7193</td>
<td>Individual Studies in Environmental Health Sciences</td>
<td>1-4</td>
</tr>
<tr>
<td>PUBHEHS 7360</td>
<td>Water Contamination: Sources and Health Impact</td>
<td>3</td>
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<tr>
<td>PUBHEHS 7375</td>
<td>Quantitative Microbial Risk Analysis Modeling</td>
<td>3</td>
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<tr>
<td>PUBHEHS 8340</td>
<td>Molecular Techniques for EHS</td>
<td>3</td>
</tr>
<tr>
<td>PUBHEPI 7411</td>
<td>Epidemiology in Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBHLTH 6189.01</td>
<td>Field Experience in Public Health</td>
<td>1-6</td>
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<tr>
<td>PUBHLTH 6189.02</td>
<td>Field Experience in Global Public Health</td>
<td>1-6</td>
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<tr>
<td>ENTMGLY 5605</td>
<td>Vector Biology and Vector Borne Disease</td>
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Applied Practice Experience

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>PUBHLTH 7189</td>
<td>Applied Practice Experience</td>
<td>2</td>
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</table>

Integrative Learning Experience

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>PUBHLTH 7998</td>
<td>Integrative Learning Experience in Public Health</td>
<td>3</td>
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</table>

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)

<table>
<thead>
<tr>
<th>Year</th>
<th>Autumn</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
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<td>PUBHLTH 6001</td>
<td>Methods in Quantitative Data Analysis</td>
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<tr>
<td></td>
<td>PUBHLTH 6002</td>
<td>History, Values and Essential Services of the U.S. Public Health System</td>
<td>2</td>
<td></td>
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<tr>
<td></td>
<td>PUBHEHS 6310</td>
<td>Principles of Environmental Health Science</td>
<td>3</td>
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<td></td>
<td>PUBHEHS 6320</td>
<td>Global Health and Environmental Microbiology Design</td>
<td>3</td>
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<td>Methods in Public Health Planning and Evaluation</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PUBHEHS 6320</td>
<td>Essentials of Population Health</td>
<td>4</td>
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<tr>
<td></td>
<td>ENVSCE 7365</td>
<td>Principles of Toxicology</td>
<td>3</td>
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<td>PUBHLTH 7189</td>
<td>Current Issues in Environmental Sciences</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Autumn</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>PUBHEHS 5325</td>
<td>Principles of Occupational Health Science</td>
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<td></td>
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</tbody>
</table>

#PUBHLTH 6001-6004: Students will be enrolled by The College of Public Health Office of Academic Programs and Student Services for 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

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