2015-2016 Curriculum Guide for Master of Science degree program with a specialization in ENVIRONMENTAL HEALTH SCIENCES

The Master of Science (MS) degree is intended for students whose interests in environmental health sciences are academically oriented rather than directed toward professional practice. MS graduates will have the knowledge and skills to participate in basic and applied research and will have the foundation to enter into a research-oriented career. It is also a natural entry point for students who are interested in pursuing a PhD degree. Because of this orientation, the emphasis in the MS degree program is on building a strong foundation in a particular specialty field, along with the research methods important in that field. To reflect this research and academic orientation, the MS degree ordinarily requires the preparation of a thesis, though it is available under a non-thesis option at the discretion of the division or specialization.

Students admitted to the MS degree program are assigned a faculty advisor who will provide guidance throughout the program. Students are encouraged to get to know their advisor and meet with him/her at least twice each semester. This document serves as a resource to be used by the student and the advisor in planning a program with a specialization in 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 (available at http://cph.osu.edu/students/graduate/handbooks) and with the Graduate School Handbook (available at http://www.gradsch.ohio-state.edu/).

PROGRAM OF STUDY

Although the focus of the MS degree program of study is in EHS, students are required to show coverage in epidemiology and biostatistics.

The MS-EHS curriculum consists of a minimum of 45 credits organized into three curricular domains:

1. Courses required for a specialization in EHS 30 credits
2. Elective courses approved for the specialization 6 credits
3. Thesis 9 credits

Required Courses in the Specialization (30 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBHEHS 5315</td>
<td>Principles of Toxicology</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEHS 6320</td>
<td>Global Health and Environmental Microbiology</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEHS 7365</td>
<td>Principles of Risk Assessment</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEHS 7380</td>
<td>Exposure Science Monitoring Techniques</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEHS 8340</td>
<td>Molecular Techniques</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEHS 7899</td>
<td>Seminar in Environmental Health Sciences</td>
<td>1, 1, 1 (3 credits total)</td>
</tr>
</tbody>
</table>

Core Course Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBHEHS 6315</td>
<td>Advanced Environmental Health Science</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHEPI 6410</td>
<td>Principles of Epidemiology</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHBIO 6210</td>
<td>Design &amp; Analysis of Studies in Health Science I</td>
<td>3 credits</td>
</tr>
<tr>
<td>PUBHBIO 6211</td>
<td>Design &amp; Analysis of Studies in Health Science II</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

*****Questions regarding the student’s program of study should be directed to their advisor*****
Electives (6 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. Very good options for elective courses are offered by the College of Food, Agriculture and Environmental Science, the College of Veterinary Medicine, and the College of Arts & Sciences.

- PUBHEHS 5320 Climate Change and Human Health 3 credits
- PUBHEHS 7193 Individual Studies in Environmental Health Sciences 1-3 credits
- PUBHEHS 7194 Group Studies in Environmental Health Sciences 1-3 credits
- PUBHEHS 7546 Advanced Food Microbiology II 2 credits
- PUBHEHS 7360 Water Contamination: Sources and Health Impact 3 credits
- PUBHEPI 6437 Cancer Epidemiology 3 credits
- PUBHLTH 6189.01 Field Experience in Public Health 1-6 credits
- PUBHLTH 6189.02 Field Experience in Global Public Health 1-6 credits

Thesis
The thesis is an integral part of the MS degree, allowing the student the opportunity to investigate a topic of personal interest and importance to the field and to integrate and synthesize from the knowledge and skills presented in the program.

- PUBHLTH 7999 Master’s Thesis Research in Public Health 3, 3, 3 (9 credits total)

Sample Curriculum Plan for the Master of Science in Environmental Health Sciences
(This is one option, students are advised to consult with their advisor for other options)

<table>
<thead>
<tr>
<th>Year 1 Autumn</th>
<th>PUBHEHS 6315</th>
<th>Advanced Environmental Health Science</th>
<th>3 credits</th>
<th>AU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PUBHEHS 6320</td>
<td>Global Health and Environmental Microbiology</td>
<td>3 credits</td>
<td>AU</td>
</tr>
<tr>
<td></td>
<td>PUBHEHS 7899</td>
<td>Seminar in Environmental Health Sciences</td>
<td>1 credit</td>
<td>AU, SP</td>
</tr>
<tr>
<td></td>
<td>PUBHBIO 6210</td>
<td>Design &amp; Analysis of Studies in Health Science I</td>
<td>3 credits</td>
<td>AU, SP*</td>
</tr>
<tr>
<td></td>
<td>PUBHEPI 6410</td>
<td>Principles of Epidemiology</td>
<td>3 credits</td>
<td>AU, SP</td>
</tr>
<tr>
<td>Year 1 Spring</td>
<td>PUBHEHS 5315</td>
<td>Principles of Toxicology</td>
<td>3 credits</td>
<td>SP</td>
</tr>
<tr>
<td></td>
<td>PUBHEHS 7365</td>
<td>Principles of Risk Assessment</td>
<td>3 credits</td>
<td>SP</td>
</tr>
<tr>
<td></td>
<td>PUBHEHS 7899</td>
<td>Seminar in Environmental Health Sciences</td>
<td>1 credit</td>
<td>AU, SP</td>
</tr>
<tr>
<td></td>
<td>PUBHEHS 8340</td>
<td>Molecular Techniques</td>
<td>3 credits</td>
<td>SP</td>
</tr>
<tr>
<td></td>
<td>PUBHBIO 6211</td>
<td>Design &amp; Analysis of Studies in the Health Sciences II</td>
<td>3 credits</td>
<td>SP</td>
</tr>
<tr>
<td></td>
<td>EHS ELECTIVES</td>
<td></td>
<td>3 credits</td>
<td>ANY</td>
</tr>
</tbody>
</table>

| Year 1 Summer | PUBHEHS 7999 | Master’s Thesis Research in Public Health | 6 credits | ANY |
| Year 2 Autumn | PUBHEHS 7380 | Exposure Science Monitoring Techniques | 3 credits | AU |
|               | PUBHEHS 7899 | Seminar in Environmental Health Sciences | 1 credit | AU, SP |
|               | PUBHEHS 7999 | Master’s Thesis Research in Public Health | 3 credits | ANY |
|               | EHS ELECTIVE | | 3 credits | ANY |

*SP offerings is only offered as a web-based course

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 Core and specialization courses. Students should familiarize themselves with Section 11 of the College of Public Health Graduate Student Handbook.

Office of Academic Programs and Student Services (OAPSS)
OAPSS staff are available to provide assistance with College, Graduate School and University policies and procedures. Students can make an appointment with a staff member in OAPSS by calling (614) 292-8350.
OAPSS address: 100 Cunz Hall/1841 Neil Ave/Columbus, Ohio/ 43210/cph.osu.edu

*****Questions regarding the student’s program of study should be directed to their advisor*****