MPH in Environmental Health

The environmental health concentration accommodates students with various backgrounds and interests, who desire careers related to the environmental aspects of public health. Specifically, this area of concentration provides the expertise and experience to analyze, monitor, interpret and mitigate the effects of chemical and physical contaminants, and microbial pathogens in water, air, soil, and food on public health. It prepares students in the M.P.H. program for technical and administrative jobs in the governmental and private sectors. For the culminating experience, students may choose between a thesis or a comprehensive exam. Students selecting the comprehensive exam option must take an additional six (6) semester credit hours of electives in lieu of the thesis. By the conclusion of the M.P.H. program, a student in the environmental health concentration will be able to:

1. Assess environmental health threats that affect the health of the public.
2. Understand the interplay between theory and practice of environmental health management.
3. Understand environmental protection strategies and approaches to reduce environmental health risks.
4. Identify, develop, apply and modify an appropriate research approach to an environmental health problem based on constraints and available resources.
5. Analyze quantitative and qualitative data to describe environmental conditions that have impacts on human health.
6. Synthesize data from a variety of sources, reflective of multidisciplinary perspectives, to develop strategies for addressing complex environmental health problems. Use biostatistics and statistical software to analyze an environmental health problem.
7. Interpret and present findings in written and verbal format from an environmental health and public health perspective.

Environmental Health Curriculum (45 SCH)

**CORE COURSES: 15 SCH**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 5210</td>
<td>Biostatistics for Public Health I</td>
<td>3 SCH</td>
</tr>
<tr>
<td>ENVR 5300</td>
<td>Environmental Health</td>
<td>3 SCH</td>
</tr>
<tr>
<td>EPID 5100</td>
<td>Principles of Epidemiology</td>
<td>3 SCH</td>
</tr>
<tr>
<td>HMAP 5210</td>
<td>Introduction to Health Management and Policy</td>
<td>3 SCH</td>
</tr>
<tr>
<td>SCBS 5110</td>
<td>Behavioral and Social Aspects of Public Health</td>
<td>3 SCH</td>
</tr>
</tbody>
</table>

**REQUIRED COURSES: 12 SCH**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 5330</td>
<td>Environmental and Occupational Toxicology</td>
<td>3 SCH</td>
</tr>
<tr>
<td>ENVR 5345</td>
<td>Physical Hazards</td>
<td>3 SCH</td>
</tr>
</tbody>
</table>
ENVR 5380 Environmental Health Microbiology 3 SCH
ENVR 5410 Environmental Data Analysis 3 SCH

PRACTICE EXPERIENCE: 3 SCH (to be eligible for enrollment, students must complete all core courses and at least two required courses)
SPH 5855 Public Health Practice Experience 3 SCH

ELECTIVE COURSES: 9 SCH for Thesis option or 15 SCH for Comprehensive Exam Option
ENVR 5310 Exposure and Risk Assessment 3 SCH
ENVR 5311 Air Pollution and Health 3 SCH
ENVR 5325 Industrial Hygiene 3 SCH
ENVR 5370 Arthropods and Public Health 3 SCH
ENVR 5420 Texas-Mexico Border Health Issues 3 SCH
ENVR 5500 Biomarkers in Environmental Epidemiology 3 SCH
ENVR 5550 Introduction to Genomics and Public Health 3 SCH
ENVR 5910 Independent Study in Environmental Health 1-3 SCH
ENVR 6600 Spatiotemporal Environmental Health Modeling 3 SCH
EPID 6690 Occupational Epidemiology 3 SCH

- Students may substitute an elective course not on this list only with prior written approval of their advisor.
- Courses not approved as substitutes will not be applied toward the degree plan.

CULMINATING EXPERIENCE: 0-6 SCH
SPH 5950 Thesis 6 SCH
Or
Comprehensive Exam (see details below) 0 SCH

Students who select the comprehensive exam option do not register for a course in order to take the exam; however, they must complete six (6) additional semester credit hours of electives. Students are responsible for informing the Department of Environmental and Occupational Health of their intentions to take the exam. A student who encounters a last minute emergency (sickness, death in the family, etc.) may appeal to the exam committee for an opportunity to take a makeup exam. Students who fail the exam may, upon recommendation of the department chair, be allowed to retake a different exam. However, an opportunity for retaking the exam is not automatic, and students may only retake the exam once.

Updated 8/1/07