Epidemiology, M.P.H.

Master of Public Health

MPH MAJOR IN EPIDEMIOLOGY PROGRAM DESCRIPTION

The MPH degree with a major in Epidemiology is designed for those who wish to acquire knowledge and skills necessary for epidemiologic practice and research. This degree will be appropriate for persons interested in a career studying the relationship of risk factors to a variety of disease, injury, and other health-related states.

WVU MPH graduates with a major in Epidemiology are qualified to work and provide leadership in state, federal, and global health agencies (e.g., Centers for Disease Control and Prevention [CDC], The National Institute for Occupational Safety and Health [NIOSH]); hospitals; infection control departments in multiple industries; academic health centers and other healthcare organizations; research institutions, foundations; insurance and managed care organizations; and pharmaceutical and biotechnology companies.

EPIDEMIOLOGY MAJOR COMPETENCIES

In addition to the standard MPH Foundational Competencies required of all MPH students, our major in Epidemiology also prepares students to meet five competencies specific to the major. These include:

1. Derive and assess basic epidemiologic frequencies and association.
2. Compare and contrast epidemiologic designs.
3. Weigh public health problems in terms of magnitude, person, time, and place.
4. Measure occurrences of incidence, morbidity, and mortality.
5. Derive appropriate inferences from epidemiologic data.

MAJOR REQUIREMENTS

A final GPA of 3.0 or higher is required for the successful completion of the program. Students must earn a minimum grade of “C-” in all PUBH and EPID coursework.

MPH Foundational Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 610</td>
<td>Contemporary Foundations of Public Health Practice</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 611</td>
<td>Epidemiology for Public Health Practice</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 612</td>
<td>Research Translation and Evaluation in Public Health Practice</td>
<td>4</td>
</tr>
<tr>
<td>PUBH 620</td>
<td>Building and Sustaining Public Health Capacity</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 621</td>
<td>Public Health Prevention and Intervention</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 630</td>
<td>MPH Field Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 640</td>
<td>Health Systems Leadership</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 641</td>
<td>Systems Thinking in Public Health Practice</td>
<td>2</td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>PUBH 696</td>
<td>Graduate Seminar</td>
<td></td>
</tr>
</tbody>
</table>

Epidemiology Major Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 611</td>
<td>Data Management and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>EPID 611</td>
<td>Concepts and Methods of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>EPID 612</td>
<td>Applied Epidemiology for Public Health</td>
<td>3</td>
</tr>
<tr>
<td>Capstone</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>EPID 629</td>
<td>Epidemiology Capstone</td>
<td></td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>EPID 696</td>
<td>Graduate Seminar</td>
<td></td>
</tr>
</tbody>
</table>

Electives: As Approved by the MPH Program Advisor

Total Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

* 1. All students in the WVU SPH MPH program are required to maintain a portfolio that demonstrates their ability to meet the competencies associated with the MPH Foundational Courses, the Department Major Courses, and to apply a selection of those competencies in an approved practice-based setting(s). This portfolio must be submitted for review at the end of each academic year, as well as reviewed and approved prior to the successful completion of the program.

2. The MPH degree will be awarded based on successful completion of all academic requirements and demonstrated achievement of competencies via the student portfolio system and class-based evaluations of competency attainment.
# SUGGESTED PLAN OF STUDY

**First Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 610</td>
<td>2</td>
<td>PUBH 620</td>
<td>2</td>
<td>PUBH 630</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 611</td>
<td>2</td>
<td>PUBH 621</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PUBH 612</td>
<td>4</td>
<td>EPID 611</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOS 611</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 640</td>
<td>3</td>
<td>Seminar</td>
<td>2</td>
</tr>
<tr>
<td>PUBH 641</td>
<td>2</td>
<td>PUBH 696</td>
<td></td>
</tr>
<tr>
<td>EPID 612</td>
<td>3</td>
<td>EPID 629</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>EPID 696</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

Total credit hours: 45

Note: With approval from the MPH Program Advisor and the Director of Practice-Based Learning, PUBH 630: MPH Field Practicum can be taken anytime during Year 2.

## Major Learning Outcomes

### EPIDEMIOLOGY

**MPH Major Competencies**

- Derive and assess basic epidemiologic frequencies and association.
- Compare and contrast epidemiologic study designs.
- Weigh public health problems in terms of magnitude, person, time, and place.
- Measure occurrences of incidence, morbidity, and mortality.
- Derive appropriate inferences from epidemiologic data.