D1. MPH and DrPH Foundational Public Health Knowledge

The school ensures that all MPH and DrPH graduates are grounded in foundational public health knowledge.

The school validates MPH and DrPH students’ foundational public health knowledge through appropriate methods.

1) Provide a matrix, in the format of Template D1-1, that indicates how all MPH and DrPH students are grounded in each of the defined foundational public health learning objectives (1-12). The matrix must identify all options for MPH and DrPH students used by the school.

Template D1-1

<table>
<thead>
<tr>
<th>#</th>
<th>Foundational Knowledge</th>
<th>MPH Courses</th>
<th>DrPH Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Explain public health history, philosophy, and values.</td>
<td>PUBH 6003 Principles and Practices of Epidemiology (ex. US public health achievements, types of prevention, descriptive epidemiology, measures)³¹</td>
<td>PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program</td>
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<td></td>
<td></td>
<td>PUBH 6011 Environmental and Biological Foundations of Public Health (ex. air pollution history, current US environmental legislation, precautionary principle, environmental justice, risk models) Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Sessions #3 and #17)³²</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Identify the core functions of public health and the 10 Essential Services.</td>
<td>PUBH 6012 Fundamentals of Health Policy (Week #1) Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Session #17)³³</td>
<td>PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program</td>
</tr>
</tbody>
</table>

³¹ All MPH students take PUBH 6003, including dual degree students, regardless of program.
³² MD/MPH students take IDIS 8311. All other students take PUBH 6011.
³³ MD/MPH students take IDIS 8311. All other students take PUBH 6012.
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| D1.3 | Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health. | PUBH 6002 Biostatistical Applications for Public Health (Quant)  
Or  
PUBH 6853 Use of SAS for Data Management and Analysis (Quant)  
PUBH 6009 Fundamentals of Public Health Program Evaluation (Qual)  
Or  
PUBH 6501 Program Evaluation (Qual) | PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program |
| 4   | List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program. | PUBH 6003 Principles and Practices of Epidemiology  
PUBH 6011 Environmental and Biological Foundations of Public Health  
Or  
IDIS 8311 Fundamentals of Patients, Populations and Systems (Session #31) | PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program |
| 5   | Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc. | PUBH 6003 Principles and Practices of Epidemiology  
PUBH 6011 Environmental and Biological Foundations of Public Health  
Or  
IDIS 8311 Fundamentals of Patients, Populations and Systems (Session #31) | PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program |
| 6   | Explain the critical importance of evidence in advancing public health knowledge. | PUBH 6003 Principles and Practices of Epidemiology  
PUBH 6007 Social and Behavioral Approaches to Public Health  
PUBH 6009 Fundamentals of Public Health Program Evaluation | PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program |
| 7   | Explain effects of environmental factors on a population’s health. | PUBH 6011 Environmental and Biological Foundations of Public Health  
Or  
IDIS 8311 Fundamentals of Patients, Populations and Systems (Sessions #3 and #8) | PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program |

34 MPH in Biostatistics students take PUBH 6853. All other students take PUBH 6002.  
35 MD/MPH students take IDIS 8311. All other students take PUBH 6011.  
36 MD/MPH students take IDIS 8311. All other students take PUBH 6011.  
37 MD/MPH students take IDIS 8311. All other students take PUBH 6011.
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<td>8</td>
<td>Explain biological and genetic factors that affect a population’s health.</td>
<td>PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8311 Fundamentals of Patients, Populations and Systems (Session #3) And IDIS 8102 Infection, Inflammation and Immunohematology (Session #116)</td>
<td>PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program</td>
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<tr>
<td>9</td>
<td>Explain behavioral and psychological factors that affect a population’s health.</td>
<td>PUBH 6007 Social and Behavioral Approaches to Public Health</td>
<td>PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program</td>
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<tr>
<td>10</td>
<td>Explain the social, political and economic determinants of health and how they contribute to population health and health inequities.</td>
<td>PUBH 6007 Social and Behavioral Approaches to Public Health</td>
<td>PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program</td>
</tr>
<tr>
<td>11</td>
<td>Explain how globalization affects global burdens of disease.</td>
<td>PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8102 Infection, Inflammation and Immunohematology (Sessions #80 and #116)</td>
<td>PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program</td>
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<tr>
<td>12</td>
<td>Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health).</td>
<td>PUBH 6011 Environmental and Biological Foundations of Public Health Or IDIS 8102 Infection, Inflammation and Immunohematology (Sessions #116 and #161)</td>
<td>PUBH 6080 Pathways to Public Health or prior public health degree from an accredited school/program</td>
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2) Provide supporting documentation that clearly identifies how the school ensures grounding in each area. Documentation may include detailed course schedules or outlines to selected modules from the learning management system that identify the relevant assigned readings, lecture topics, class activities, etc. For non-course-based methods, include web links or handbook excerpts that describe admissions prerequisites.

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³⁸ MD/MPH students take IDIS 8311 and IDIS 8102. They also complete other classes as part of medical school that addresses the biological and genetic factors that affect health. All other students take PUBH 6011.
³⁹ MD/MPH students take IDIS 8102. All other students take PUBH 6011.
⁴⁰ MD/MPH students take IDIS 8102. All other students take PUBH 6011.
All MPH students at GWSPH (except MD/MPH) take a set of core courses that teach and assess the D1 competencies. These core classes\(^{41}\) were reassessed in 2018 in light of the new CEPH accreditation requirements. Additional core classes were added to address the competencies in leadership and interprofessional experience\(^{42}\) found in Criterion D2. MD/MPH students are the only MPH students who do not take all the required core courses because they receive credit for some of the D1 competencies through their medical school curriculum.

See ERF > Criterion D > Criterion D1 > D1.2: Temp D1-1_methods.

3) If applicable, assessment of strengths and weaknesses related to this criterion and plans for improvement in this area.

**Strengths**
- PUBH 6080 Public Health Pathways is a self-paced online course. This asynchronous course material allows students to complete the work at their convenience and review materials as needed.
- GWSPH provides options and flexibility to MPH students to meet these competencies as well as exposure to different departments, programs and faculty.
- Core courses are routinely reviewed and revisions are made based on feedback from course directors and students.

**Challenges**
- Navigating the transition to the new core curriculum while students were still completing prior curricula was challenging, particularly when students went on a leave of absence and then returned to their program.
- The previous mechanisms of ensuring that students completed PUBH 6080 and their completion was recorded was challenging. The new system of building PUBH 6080 into Blackboard and linking the material to existing courses should alleviate some of these burdens.

**Future Plans**
- PUBH 6009 is scheduled to undergo an extensive review and revision in 2023–2024 for implementation in fall 2024 to ensure consistency between online and residential versions.
- PUBH 6011 will undergo a partial revision to refresh material and address workload issues identified from student feedback.

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\(^{42}\) PUBH 6021 Essentials of Public Health Practice and Leadership 1, PUBH 6022 Essentials of Public Health Practice and Leadership 2 and PUBH 6023 Interprofessional Education Experience.