POPCULATION, FAMILY AND REPRODUCTIVE HEALTH, PhD

PhD Program Overview

The emphasis of the PFRH PhD program (https://publichealth.jhu.edu/academics/phd-dept-of-population-family-and-reproductive-health/) is to integrate coursework in life course and population health with the application of a range of research methods. The PFRH PhD curriculum is focused on equipping students with a fundamental understanding of statistical methods and their application, epidemiology, research ethics, advanced research methods, and the application of life course perspectives on health, demography, and population dynamics.

Faculty in the PFRH Department have expertise in health throughout the life course with a specific focus on certain populations and areas (https://publichealth.jhu.edu/departments/population-family-and-reproductive-health/research-and-practice/life-course-framework/). PhD students select courses related to these areas of study:


School-wide PhD Requirements

Students must choose:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Select one of the following series:</td>
<td>16</td>
</tr>
<tr>
<td>PH.140.621</td>
<td>Statistical Methods in Public Health I</td>
<td></td>
</tr>
<tr>
<td>&amp; PH.140.622</td>
<td>and Statistical Methods in Public Health II</td>
<td></td>
</tr>
<tr>
<td>&amp; PH.140.623</td>
<td>and Statistical Methods in Public Health III</td>
<td></td>
</tr>
<tr>
<td>&amp; PH.140.624</td>
<td>and Statistical Methods in Public Health IV</td>
<td></td>
</tr>
<tr>
<td>PH.140.651</td>
<td>Methods in Biostatistics I</td>
<td></td>
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<tr>
<td>&amp; PH.140.652</td>
<td>and Methods in Biostatistics II</td>
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</tr>
<tr>
<td>&amp; PH.140.653</td>
<td>and Methods in Biostatistics III</td>
<td></td>
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<tr>
<td>&amp; PH.140.654</td>
<td>and Methods in Biostatistics IV</td>
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</tr>
<tr>
<td></td>
<td>Select a minimum of 3 units of Research Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PH.550.860</td>
<td>Academic &amp; Research Ethics at JHSPH</td>
<td>0</td>
</tr>
</tbody>
</table>

Students must complete all courses meeting the Council on Education for Public Health (CEPH) objectives prior to completing the School-wide Preliminary exam.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td>19</td>
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</tbody>
</table>

CEPH Requirements

1. Explain public health history, philosophy, and values.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PH.380.624</td>
<td>Maternal and Child Health Legislation and Programs</td>
<td>4</td>
</tr>
<tr>
<td>PH.552.601</td>
<td>Foundational Principles of Public Health</td>
<td>0.5</td>
</tr>
</tbody>
</table>

2. Identify the core functions of public health and the 10 Essential Services.

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</table>

3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health. (Must take 380.603 and a qualitative course)

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<th>Credits</th>
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<tbody>
<tr>
<td>PH.380.603</td>
<td>Demographic Methods for Public Health</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PH.224.690</td>
<td>Qualitative Research Theory and Methods</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>PH.550.604 Qualitative Reasoning in Public Health</td>
<td>2</td>
</tr>
<tr>
<td>OR</td>
<td>PH.552.603 The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health</td>
<td>0.5</td>
</tr>
</tbody>
</table>

4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.

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<tbody>
<tr>
<td>PH.380.600</td>
<td>Principles of Population Change</td>
<td>4</td>
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</table>

5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.

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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH.340.751</td>
<td>Epidemiologic Methods 1</td>
<td>5</td>
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</tbody>
</table>

6. Explain the critical importance of evidence in advancing public health knowledge.

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<td>PH.340.751</td>
<td>Epidemiologic Methods 1</td>
<td>5</td>
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</table>

7. Explain effects of environmental factors on a population's health.

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</thead>
<tbody>
<tr>
<td>PH.380.616</td>
<td>Child Health Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PH.552.607</td>
<td>Essentials of Environmental Health</td>
<td>0.5</td>
</tr>
</tbody>
</table>

8. Explain biological and genetic factors that affect a population’s health.

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<tr>
<td>PH.380.604</td>
<td>Life Course Perspectives on Health</td>
<td>4</td>
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</tbody>
</table>

9. Explain behavioral and psychological factors that affect a population’s health.
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities.

Code  Title  Credits
PH.380.604  Life Course Perspectives on Health  4

11. Explain how globalization affects global burdens of disease.

Code  Title  Credits
PH.380.600  Principles of Population Change  4

12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health).

Code  Title  Credits
PH.552.612  Essentials of One Health  0.5

PFRH PhD Content Area Competencies
Students must take a minimum of seven unique courses to fulfill these requirements.

1. Apply a life course framework to understand population health problems and illustrate how societal, behavioral, and psychological factors interact with biological and genetic factors to affect population health over the life course.

Code  Title  Credits
PH.380.604  Life Course Perspectives on Health  4

2. Evaluate the major explanations and effects of demographic changes on the health of populations.

Code  Title  Credits
PH.380.600  Principles of Population Change  4

3. Calculate and interpret measures of mortality, fertility, and migration.

Code  Title  Credits
PH.380.603  Demographic Methods for Public Health  4

4. Critically review research related to the causes and consequences of major health concerns for selected populations across the life course.

Code  Title  Credits
Select one of the following:
PH.380.623  Adolescent Health and Development  3
PH.380.747  International Adolescent Health  3
PH.380.616  Child Health Epidemiology  3
PH.380.664  Reproductive and Perinatal Epidemiology  4
PH.380.655  Social and Economic Aspects of Human Fertility  3
PH.380.750  Migration and Health: Concepts, Rates, and Relationships  3
PH.380.666  Women’s Health  3

5. Assess the effectiveness of policies and programs designed to promote the health of selected populations across the life course.

Code  Title  Credits
Select one of the following:
PH.380.624  Maternal and Child Health Legislation and Programs  4
PH.380.665  Family Planning Policies and Programs  4

PH.380.661  Clinical Aspects of Maternal and Newborn Health  3
PH.380.667  Women’s Health Policy  3
PH.380.768  Selected Topics in Women’s Health and Women’s Health Policy  4

6. Assess population health and/or health promotion strategies through application of theoretical frameworks.

Code  Title  Credits
Select one of the following:
PH.380.642  Child Health and Development  3
PH.380.725  The Social Context of Adolescent Health and Development  3
PH.380.744  Nutrition and Growth in Maternal and Child Health  3
PH.380.655  Social and Economic Aspects of Human Fertility  3
PH.380.750  Migration and Health: Concepts, Rates, and Relationships  3
PH.380.668  International Perspectives on Women, Gender, and Health  3

7. Evaluate the effect of health systems on the health of selected populations across the life course.

Code  Title  Credits
Select one of the following:
PH.380.661  Clinical Aspects of Maternal and Newborn Health  3
PH.380.760  Clinical Aspects of Reproductive Health  3
PH.221.627  Issues in the Reduction of Maternal and Neonatal Mortality in Low income Countries  4
PH.380.665  Family Planning Policies and Programs  4
PH.380.624  Maternal and Child Health Legislation and Programs  4
PH.380.721  Schools and Health  3

PFRH PhD Research Methods Requirements
- Evaluate and apply study designs and strategies for measurement and data collection to address research and evaluation questions about the health of populations.

Code  Title  Credits
Take the following 4 courses:
PH.340.751  Epidemiologic Methods 1  5
PH.340.752  Epidemiologic Methods 2  5
PH.380.711  Issues in Survey Research Design  3
PH.330.657  Statistics for Psychosocial Research: Measurement  4

- Analyze data using methodological tools appropriate to the study question and available data.

Code  Title  Credits
Select 1-2 of the following:
PH.340.753  Epidemiologic Methods 3  5
PH.140.640  Statistical Methods for Sample Surveys  3
PH.140.655  Analysis of Multilevel and Longitudinal Data  4
PH.140.658 Statistics for Psychosocial Research: Structural Models 4
PH.224.690 Qualitative Research Theory and Methods 3
PH.224.691 Qualitative Data Analysis 3
PH.410.710 Concepts in Qualitative Research for Social and Behavioral Sciences 3
PH.410.712 Theory and Practice in Qualitative Data Analysis and Interpretation for The Social and Behavioral Sciences 3

Interpret data based on the strength of evidence, recognize study limitations, and draw appropriate inferences.

### Code | Title                                                                 | Credits |
--- | --- | --- |
PH.380.823 Research Seminar in Population, Family and Reproductive Health I 2
PH.380.824 Research Seminar in Population, Family and Reproductive Health II 2
PH.380.662 Critiquing the Research Literature in Maternal, Child, and Reproductive Health 4

# PFRH PhD Program Policies

For a full list of program policies, please visit the PhD in PFRH (https://publichealth.jhu.edu/academics/phd-dept-of-population-family-and-reproductive-health/) page where students can find our handbook.

# PhD Program Competencies

According to the requirements of the Council on Education for Public Health (CEPH), all BSPH degree students must be grounded in foundational public health knowledge. Please view the list of specific CEPH requirements by degree type (https://e-catalogue.jhu.edu/public-health/ceph-requirements/).

All PFRH doctoral students must meet proficiency in the following PFRH PhD content area competencies:

1. Apply a life course framework to understand population health problems and illustrate how societal, behavioral, and psychological factors interact with biological and genetic factors to affect population health over the life course.
2. Evaluate the major explanations and effects of demographic changes on the health of populations.
3. Calculate and interpret measures of mortality, fertility, and migration.
4. Critically review research related to the causes and consequences of major health concerns for selected populations across the life course.
5. Assess the effectiveness of policies and programs designed to promote the health of selected populations across the life course.
6. Assess population health and/or health promotion strategies through application of theoretical frameworks.
7. Evaluate the effect of health systems on the health of selected populations across the life course.

Additionally, all PFRH doctoral students must attain proficiency in the following PFRH PhD research methods competencies:

1. Evaluate and apply study designs for addressing research and evaluation questions about the health of populations.
2. Evaluate and apply rigorous strategies for measurement and data collection across a range of study designs.