

POPULATION, 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:

- Child and Adolescent Health (<https://publichealth.jhu.edu/departments/population-family-and-reproductive-health/research-and-practice/life-course-framework/child-and-adolescent-health/>)
- Maternal, Fetal, and Perinatal Health (<https://publichealth.jhu.edu/departments/population-family-and-reproductive-health/research-and-practice/maternal-fetal-and-perinatal-health/>)
- Population and Health (<https://publichealth.jhu.edu/departments/population-family-and-reproductive-health/research-and-practice/life-course-framework/population-and-health/>)
- Women's, Sexual and Reproductive Health (<https://publichealth.jhu.edu/departments/population-family-and-reproductive-health/research-and-practice/womens-sexual-and-reproductive-health/>)

School-wide PhD Requirements

Students must choose:

Code	Title	Credits
Select one of the following series:		16
PH.140.621 & PH.140.622 & PH.140.623 & PH.140.624	Statistical Methods in Public Health I and Statistical Methods in Public Health II and Statistical Methods in Public Health III and Statistical Methods in Public Health IV	
PH.140.651 & PH.140.652 & PH.140.653 & PH.140.654	Methods in Biostatistics I and Methods in Biostatistics II and Methods in Biostatistics III and Methods in Biostatistics IV	
Select a minimum of 3 units of Research Ethics		3
PH.550.860	Academic & Research Ethics at BSPH	0
PH.306.665	Research Ethics and integrity	3
PH.550.600	Living Science Ethics - Responsible Conduct of Research	1
PH.340.683	Human Rights in Public Health Practice	2
PH.221.616	Ethics and Global Public Health Practice	2

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

Total Credits 27

CEPH Requirements

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

Code	Title	Credits
Select one of the following:		
PH.380.624	Maternal and Child Health Legislation and Programs	4
PH.552.601	Foundational Principles of Public Health	0.5

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

Code	Title	Credits
Select one of the following:		
PH.380.624	Maternal and Child Health Legislation and Programs	4
PH.552.601	Foundational Principles of Public Health	0.5

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

Code	Title	Credits
PH.380.603	Demographic Methods for Public Health	4
One of the following quantitative courses is required:		
PH.224.690	Qualitative Research Theory and Methods	0.5-3
or PH.410.710 Concepts in Qualitative Research for Social and Behavioral Sciences		
or PH.550.604 Qualitative Reasoning in Public Health		
or PH.552.603 The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health		

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

Code	Title	Credits
PH.380.600	Principles of Population Change	4

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

Code	Title	Credits
PH.340.751	Epidemiologic Methods 1	5

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

Code	Title	Credits
PH.340.751	Epidemiologic Methods 1	5

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

Code	Title	Credits
Select one of the following:		
PH.380.616	Child Health Epidemiology	3
PH.552.607	Essentials of Environmental Health	0.5

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

Code	Title	Credits
PH.380.604	Life Course Perspectives on Health	4
9.	Explain behavioral and psychological factors that affect a population's health.	
Code	Title	Credits
PH.380.604	Life Course Perspectives on Health	4
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
Take the following 3 courses:		
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, students may visit the PhD in PFRH (<https://publichealth.jhu.edu/academics/phd-dept-of-population-family-and-reproductive-health/>) page to find the 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.
3. Analyze data using methodological tools appropriate to the study question and available data.
4. Interpret data based on the strength of evidence, recognize study limitations, and draw appropriate inferences.
5. Participate in the preparation of a peer-reviewed manuscript.