

POPULATION, FAMILY AND REPRODUCTIVE HEALTH, MHS

The academic Master of Health Science (MHS) in Population, Family and Reproductive Health (<https://publichealth.jhu.edu/academics/mhs-dept-of-population-family-and-reproductive-health/>) program is a full-time, one-year, 64 credit program designed for those with a desire to enhance their research skills in public health and includes both methods and content courses. The curriculum is intended for students with two or more years of public health or related experience to inform their area of research inquiry prior to entry into the program.

Faculty in the PFRH Department have expertise in health throughout the life course with specific focus on certain populations and areas (<https://publichealth.jhu.edu/departments/population-family-and-reproductive-health/research-and-practice/life-course-framework/>). MHS 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/>)

Program Requirements

Course location and modality is found on the BSPH website (<https://www.jhsph.edu/courses/>).

MHS Departmental Competencies

| Code | Title | Credits |
|---|---|---------|
| 1. Explain the life course approach to understanding population health | | |
| PH.380.604 | Life Course Perspectives on Health | 4 |
| 2. Compare different sources of demographic data including their strengths and limitations (Choose 1) | | |
| PH.380.600 | Principles of Population Change | 4 |
| PH.380.603 | Demographic Methods for Public Health | 4 |
| 3. Describe risk factors and/or causes of health outcomes in select populations across the lifecourse (Choose 1) | | |
| PH.380.623 | Adolescent Health and Development | 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 |
| PH.380.765 | Preventing Infant Mortality and Promoting the Health of Women, Infants and Children | 3 |

4. Describe the strengths and limitations of key interventions, policies, and/or programs designed to promote the health of selected populations across the lifecourse (Choose 1)

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|------------|--|---|
| 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 |
| 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 |

5. Identify theoretical frameworks used to assess the health of select populations (Choose 1)

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|------------|---|---|
| PH.380.725 | The Social Context of Adolescent Health and Development | 3 |
| PH.380.642 | Child Health and Development | 3 |
| PH.380.744 | Nutrition and Growth in Maternal and Child Health | 3 |
| PH.380.762 | HIV Infection in Women, Children, and Adolescents | 4 |
| PH.380.668 | International Perspectives on Women, Gender, and Health | 3 |
| PH.380.747 | International Adolescent Health | 3 |

6. Describe a range of study designs for addressing research and evaluation questions about the health of populations (Choose 1)

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|------------|---|---|
| PH.340.722 | Epidemiologic Inference in Public Health II | 4 |
| PH.380.611 | Fundamentals of Program Evaluation | 4 |
| PH.380.711 | Issues in Survey Research Design | 3 |

7. Communicate research and evaluation methods related to assessment of the health of populations to a variety of audiences (Choose 1)

| | | |
|------------|---|---|
| PH.380.612 | Applications in Program Monitoring and Evaluation | 4 |
| PH.340.770 | Public Health Surveillance | 3 |

CEPH Learning Objectives

| Code | Title | Credits |
|--|---|---------|
| CEPH Learning Objective 1 (Choose 1): | | |
| PH.380.624 | Maternal and Child Health Legislation and Programs | 4 |
| OR | | |
| PH.552.601 | Foundational Principles of Public Health | 0.5 |
| CEPH Learning Objective 2 (Choose 1): | | |
| PH.380.624 | Maternal and Child Health Legislation and Programs | 4 |
| OR | | |
| PH.552.601 | Foundational Principles of Public Health | 0.5 |
| CEPH Learning Objective 3 (Choose 1): | | |
| PH.380.603 | Demographic Methods for Public Health | 4 |
| OR | | |
| PH.552.602 | The Role of Quantitative Methods in Public Health If take 552.602 must also take 552.603 | 0.5 |
| AND | | |
| PH.224.690 | Qualitative Research Theory and Methods | 3 |
| OR | | |

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|---|---|-----|
| PH.552.603 | The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health | 0.5 |
| CEPH Learning Objective 4 (Choose 1): | | |
| PH.380.600 | Principles of Population Change | 4 |
| OR | | |
| PH.380.765 | Preventing Infant Mortality and Promoting the Health of Women, Infants and Children | 3 |
| OR | | |
| PH.552.604 | Causes and Trends in Morbidity and Mortality | 0.5 |
| CEPH Learning Objective 5 (Choose 1): | | |
| PH.340.721 | Epidemiologic Inference in Public Health I | 5 |
| CEPH Learning Objective 6 (Choose 1): | | |
| PH.380.664 | Reproductive and Perinatal Epidemiology | 4 |
| OR | | |
| PH.552.606 | The Critical Importance of Evidence in Advancing Public Health Knowledge | 0.5 |
| CEPH Learning Objective 7 (Choose 1): | | |
| PH.380.616 | Child Health Epidemiology | 3 |
| OR | | |
| PH.552.607 | Essentials of Environmental Health | 0.5 |
| CEPH Learning Objective 8 (Choose 1): | | |
| PH.380.604 | Life Course Perspectives on Health | 4 |
| CEPH Learning Objective 9 (choose 1): | | |
| PH.380.604 | Life Course Perspectives on Health | 4 |
| CEPH Learning Objective 10 (Choose 1): | | |
| PH.380.604 | Life Course Perspectives on Health | 4 |
| CEPH Learning Objective 11 (Choose 1): | | |
| PH.380.600 | Principles of Population Change | 4 |
| OR | | |
| PH.552.611 | Globalization and Population Health | 0.5 |
| CEPH Learning Objective 12: | | |
| PH.552.612 | Essentials of One Health | 0.5 |

Departmental and Schoolwide Requirements

| Code | Title | Credits |
|--|---|---------|
| PH.380.850 | PFRH Master's Essay <small>This course is taken for two consecutive terms (terms 3 and 4)</small> | 3 - 6 |
| AND | | |
| PH.380.850 | PFRH Master's Essay <small>This course is taken for two consecutive terms (terms 3 and 4)</small> | 3 - 6 |
| Code | Title | Credits |
| Applying statistical methods to address the health of populations (Choose 4 in sequence) | | |
| PH.140.621 | Statistical Methods in Public Health I | 4 |
| AND | | |
| PH.140.622 | Statistical Methods in Public Health II | 4 |
| AND | | |
| PH.140.623 | Statistical Methods in Public Health III | 4 |

| Code | Title | Credits |
|--|--|---------|
| Applying epidemiological methods to address the health of populations (Choose 1) | | |
| PH.340.721 | Epidemiologic Inference in Public Health I | 5 |

| Code | Title | Credits |
|---|---|---------|
| Applying ethical concepts and tools to population health research and practice. | | |
| PH.550.860 | Academic & Research Ethics at BSPH | 0 |
| AND | | |
| PH.306.665 | Research Ethics and integrity | 3 |
| OR | | |
| PH.550.600 | Living Science Ethics - Responsible Conduct of Research | 1 |
| If student takes 550.600, must also take one of the following: | | |
| PH.306.663 | Legal and Ethical Issues in Health Services Management | 3 |
| OR | | |
| PH.221.616 | Ethics and Global Public Health Practice | 2 |

For Program Policies, please visit About the MHS (<https://publichealth.jhu.edu/academics/mhs-dept-of-population-family-and-reproductive-health/>) found on the Population, Family and Reproductive Health page.

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/>).

MHS Departmental Competencies

1. Explain the life course approach to understanding population health.
2. Compare different sources of demographic data including their strengths and limitations.
3. Describe risk factors and/or causes of health outcomes in select populations across the lifecourse.
4. Describe the strengths and limitations of key interventions, policies, and/or programs designed to promote the health of selected populations across the lifecourse.
5. Identify theoretical frameworks used to assess the health of select populations.
6. Describe a range of study designs for addressing research and evaluation questions about the health of populations.
7. Communicate research and evaluation methods related to assessment of the health of populations to a variety of audiences.

CEPH Learning Objectives

1. Explain public health history, philosophy and values
2. Identify the core functions of public health and the 10 Essential Services
3. Explain the role of quantitative and qualitative methods and sciences 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

5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge
7. Explain effects of environmental factors on a population's health
8. Explain biological and genetic factors that affect a population's health
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
11. Explain how globalization affects global burdens of disease
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)