Program Description
The rigorous Public Health PhD program at GPH allows students to balance the theoretical with the practical; the innovation with the application. Students will work side-by-side with, and under the guidance of, esteemed faculty from NYU’s global and interdisciplinary network on vanguard research and solutions to universal public health issues.

Concentrations
Students will further tailor their studies by selecting one of the following four areas of study.

Epidemiology
The Epidemiology concentration will deepen your understanding and application of advanced data analytic techniques and research methodology, taking at least three courses in these disciplines. You'll also identify a specialization area (e.g. chronic disease epidemiology, mental health epidemiology, etc.) and take a minimum of two courses in this specialization area.

Social and Behavioral Sciences
In the Social & Behavioral Sciences Concentration, you will identify a social science discipline that will serve as your subfield, such as sociology, political science, anthropology, or psychology. You will take at least two additional courses in advanced methods, as well as a minimum of three theory or seminar courses in your social science subfield.

Public Health Policy and Management
The Public Health Policy and Management concentration prepares students to apply appropriate research methods to analyze health policy and management issues and questions, synthesize evidence to guide policymaking and assess public policies and programs that promote population health and health equity, and assess different theoretical perspectives in management and apply these ideas to the identification, analysis and understanding of critical themes and issues in health care and public health. The PHPM PhD concentration builds on doctoral-level methods, policy and management courses offered at Wagner and Stern, combined with PhD-level public health policy and management as well as health services and policy research courses offered at the School of Global Public Health.

Biostatistics
The Biostatistics concentration prepares students for careers in which they will develop and apply statistical methods to advance research in public health and biomedical sciences. The program is designed to train students to be independent scholars in the theory, methodology, and application of biostatistics. The program includes classroom learning, training in consulting and scientific collaboration, and mentored independent research. Dissertation research will typically be motivated by important problems in public health that require novel statistical methods for design or analysis. Upon completion students will have gained a broad foundation in statistical computing, public health sciences, and learned to communicate effectively with biostatisticians and scientists from other disciplines.

Admissions
All applications to the PhD programs at NYU GPH must be submitted through SOPHAS (https://sophas.org/), the common application for schools and programs of public health. You are required to select a single area of concentration when you apply, and we encourage you to research the four different areas of study available to identify one which best aligns with your interests.

In general, the elements of a complete application include:

- SOPHAS application form
- Official transcripts from each institution attended (or an evaluation of your credentials if you graduated from a foreign institution)
- Three letters of recommendation
- Personal statement
- Resume/CV
- English language proficiency exam results for all applicants whose native language is not English and who did not receive the equivalent of a US bachelor’s degree at an institution where English is the primary language of instruction.
- Writing sample (must be sole author or first author among multiple)

Although not required, PhD applicants are encouraged to identify potential faculty mentors at NYU whose research interests align with theirs and with whom they would like to work with in a proposed area of research interest.

Prerequisite Courses
These courses are only required for students who enter the program without an MPH. For questions related to this, please consult with the Director of Doctoral Studies.

Degree Requirements
For students who matriculated in Fall 2020 and after, the total doctoral degree requirements are 72 credits. This includes the addition of 33 doctoral research credits that will be required for all doctoral students effective Fall 2020.

Epidemiology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GPH-GU 2106</td>
<td>Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 2995</td>
<td>Biostatistics for Public Health</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 2110</td>
<td>Health Care Policy</td>
<td>2</td>
</tr>
<tr>
<td>GPH-GU 2112</td>
<td>Public Health Management and Leadership</td>
<td>2</td>
</tr>
<tr>
<td>GPH-GU 2140</td>
<td>Global Issues in Social &amp; Behavioral Health</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 2153</td>
<td>Global Environmental Health</td>
<td>3</td>
</tr>
</tbody>
</table>
Students will engage in a course of study designed to deepen their understanding and application of advanced data analytic techniques and research methodology. Students are required to take two of the specialized courses listed.

**Specialization Area**
Select two specialization courses, by advisement, from the following:

- GPH-GU 3152: Advanced Agent-Based Modeling
- GPH-GU 3374: Advanced Epidemiological Methods I: Evaluation of Epidemiological Studies
- GPH-GU 3275: Advanced Epidemiological Methods II: Practical Applications in Epidemiology

Total Credits: 72

1. Required only for students who have not taken an equivalent intermediate level course in epidemiology and have obtained permission to waive this course.
2. Students should identify a social science discipline that will serve as their sub-field. Possibilities include sociology, political science, anthropology, or psychology. Students are required to take the three advanced methods courses listed above.
3. Students will identify a specialization area (e.g. chronic disease epidemiology, mental health epidemiology, etc.) and take three courses in their specialization area.

### Social and Behavioral Sciences

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPH-GU 2930</td>
<td>Epidemiological Methods and Design</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 3020</td>
<td>Evidence-Based Public Health &amp; Systematic Review Best Practices</td>
<td>0</td>
</tr>
<tr>
<td>GPH-GU 2450</td>
<td>Intermediate Epidemiology</td>
<td>1</td>
</tr>
<tr>
<td>GPH-GU 3500</td>
<td>Methods in Community Health Research</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 3000</td>
<td>Perspectives in Public Health: Doctoral Seminar I</td>
<td>1.5</td>
</tr>
<tr>
<td>GPH-GU 3010</td>
<td>Perspectives in Public Health: Doctoral Seminar II</td>
<td>1.5</td>
</tr>
<tr>
<td>GPH-GU 3353</td>
<td>Regression I: Linear Regression and Modeling</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 3354</td>
<td>Regression II: Categorical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 3960</td>
<td>Theories in Public Health Practice &amp; Research</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 5170</td>
<td>Introduction to Public Health</td>
<td>0</td>
</tr>
<tr>
<td>GPH-GU 3015</td>
<td>Doctoral Research (repeated, for a total of 33 credits)</td>
<td>33</td>
</tr>
<tr>
<td>GPH-GU 3200</td>
<td>Dissertation Proposal Seminar</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 3260</td>
<td>Complex Systems, Disasters, and the Social Ecology of Health</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 3040</td>
<td>Intervention &amp; Prevention Science</td>
<td>3</td>
</tr>
<tr>
<td>GPH-GU 3210</td>
<td>Qualitative Analysis: Interviewing and Mixed Methods Approaches</td>
<td>3</td>
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### Electives
Select 6 elective credits from the list below, or courses chosen in consultation with an advisor or concentration director:

- GPH-GU 2363: Causal Inference: Design and Analysis
- GPH-GU 2135: Dissemination and Implementation Science in Health Care and Public Health
- GPH-GU 2480: Longitudinal Analysis of Public Health Data
- APSTA-GE 2042: Multi-Level Modeling: Nested Data/Longitudinal Data
- GPH-GU 2225: Psychometric Measurement and Analysis in Public Health Research and Practice
- GPH-GU 2387: Survey Design, Analysis, and Reporting

Total Credits: 72

1. Required only for students who have not taken an equivalent intermediate level course in epidemiology and have obtained permission to waive this course.
2. Students should identify a social science discipline that will serve as their sub-field. Possibilities include sociology, political science, anthropology, or psychology. Students are required to take the three advanced methods courses listed above.
Health students are expected to demonstrate competence in their area of study via successful completion of both.

**Candidacy Exam**

In June following your second year of study, you will sit for the candidacy examination to assess your potential to successfully undertake scholarly research at the PhD level.

**Dissertation**

After you pass the candidacy exam, you must prepare a dissertation proposal that outlines your research ideas and officially form a dissertation committee. The dissertation is the culmination of the PhD degree and should demonstrate not only your mastery of the literature of the subject, but also an ability to carry out independent research that results in a genuine contribution to public health knowledge, or an original interpretation of existing knowledge in an articulate and impactful way.

**Sample Plan of Study**

**Timeline**

Although the maximum allotted time you have to complete the degree is seven years, we expect most GPH doctoral students to complete their degree in four or five years. The sample timeline below assumes that you have completed the prerequisite courses (https://publichealth.nyu.edu/doctorate/admissions/) prior to entering into the doctoral program; if you have not, another year of coursework would be added to this timeline. Although the time it takes to complete the PhD degree varies for each student, we expect that students will typically complete the candidacy in Year 2 and the dissertation defense in Years Four/Five. See a sample timeline of a typical PhD degree completion on the Doctorate page.

<table>
<thead>
<tr>
<th>Year</th>
<th>Coursework</th>
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<tbody>
<tr>
<td>One</td>
<td>Systematic literature review</td>
</tr>
<tr>
<td>Two</td>
<td>Candidacy Exam (Summer after year two)</td>
</tr>
<tr>
<td>Three</td>
<td>Defend dissertation proposal</td>
</tr>
<tr>
<td>Four/Five</td>
<td>Dissertation defense</td>
</tr>
</tbody>
</table>

**Program Sequence**

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<td>GPH-GU 3020</td>
<td>Evidence-Based Public Health &amp; Systematic Review Best Practices</td>
</tr>
<tr>
<td>GPH-GU 3015</td>
<td>Doctoral Research</td>
</tr>
<tr>
<td>GPH-GU 3017</td>
<td>Introduction to Public Health</td>
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</tbody>
</table>

<table>
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<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>1.5-6</td>
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</tbody>
</table>

1 Required only for students who have not taken an equivalent intermediate level course in epidemiology and have obtained permission to waive this course.

**Candidacy and Dissertation**

The culmination of years of advanced study, ardent research, and dedicated attention to improving the global public health paradigm are the candidacy exam and subsequent dissertation. All PhD in Public Health students are expected to demonstrate competence in their area of study via successful completion of both.
Learning Outcomes

PhD Competencies
1. Discuss and critically evaluate the broad public health literature and literature related to the student’s discipline.
2. Apply public health concepts in the framing of research questions and design a proposal to address the gaps identified in the student’s discipline.
3. Explain the principles of research ethics and apply these principles to specific research projects.
4. Apply qualitative and/or quantitative techniques to analyze and synthesize data related to public health issues.
5. Author a publishable manuscript suitable for peer-reviewed publication as an independent researcher and present to colleagues and professionals in the field.
6. Convey public health concepts and methodologies to undergraduate and/or graduate students.

Concentration-Specific Competencies

Biostatistics
1. Critically evaluate public health and biomedical studies with respect to their design features (i.e., type I error, power), biases in sample selection and retention, and efficiency and correctness of analyses and interpretation.
2. Apply appropriate statistical methods and statistical software for optimal design of public health and biomedical research studies.
3. Apply appropriate statistical methods and statistical software for optimal analysis of public health and biomedical research studies.
4. Provide appropriate statistical interpretation of the results of data analyses of public health and biomedical studies.
5. Communicate and teach biostatistical principles and methods to researchers and trainees in public health and the biomedical sciences.
6. Understand ethical principles of study design, data analysis and interpretation.

Epidemiology
1. Critically evaluate public health and medical literature with respect to disease (outcome) measures, measures of association, study design options, bias, confounding, and effect measure modification.
2. Interpret descriptive epidemiologic studies in order to develop hypotheses of possible risk factors for a health outcome. • Apply quantitative methods to analyze and synthesize epidemiologic data related to public health issues.
3. Design robust observational and experimental studies to address public health and clinical problems.
4. Deploy central concepts, methods, and applications of contemporary modeling in epidemiology, including transmission dynamics of infectious, chronic, vector-borne, and sexually transmitted diseases and the manner in which social networks and human behaviors affect those dynamics and their control.
5. Design and present and epidemiologic investigation resulting in a publishable manuscript.

Public Health Policy and Management
1. Apply appropriate research methods to analyze health policy and management issues and questions.
2. Synthesize evidence to guide policymaking and assess public policies and programs that promote population health and health equity.
3. Assess different theoretical perspectives in management and apply these ideas to the identification, analysis and understanding of critical themes and issues in health care and public health.

Social and Behavioral Sciences
1. Apply knowledge from a social science specialization (sociology, political science, psychology, anthropology) to a public health problem.
2. Critically assess major theories, trends, and debates in the social and behavioral sciences literature regarding health.
3. Develop skills used to choose appropriate research designs and statistical methods for answering public health questions in the field of social and behavioral sciences.
4. Design rigorous and ethical research studies that examine theories or conceptual models relevant to the social and behavioral sciences.
5. Assess the means by which the social determinants of health create challenges to achieving health equity at the behavioral, community & societal levels.
6. Communicate social and behavioral health theories, concepts, and scholarship in oral and written form to diverse audiences.
Policies

NYU Policies
University-wide policies can be found on the New York University Policy pages (https://bulletins.nyu.edu/nyu/policies/).

School of Global Public Health Policies
A list of related academic policies can be found on the School of Global Public Health academic policies page (https://bulletins.nyu.edu/graduate/global-public-health/academic-policies/).