

PUBLIC HEALTH (PHD)

NYSED: 07948 HEGIS: 1214.00 CIP: 26.0102

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:

Biostatistics

The Biostatistics concentration focuses on statistical foundations and methods for study design, data analysis, interpretation and communication, with concern for ethics, equity, and awareness of structural racism and their roles in health.

Epidemiology

The Epidemiology concentration is designed to deepen students' understanding and application of advanced data analytic techniques and research methodology. Students complete coursework in advanced epidemiologic methods and applied biostatistics and engage in mentored research activities to develop mastery in the conceptualization and implementation of independent epidemiologic research.

Global Environmental Health

The Global Environmental Health concentration trains the next generation of public health leaders and researchers. In an era marked by unprecedented global challenges, this program equips students with the advanced theoretical knowledge, critical analytical skills, and innovative research methodologies necessary to address the complex interplay between planetary health and human well-being.

Public Health Policy and Management

The Public Health Policy and Management concentration is dedicated to the rigorous exploration and application of research methods, legal frameworks, policy development, and managerial strategies pertinent to contemporary public health issues and challenges. We delve deeply into a wide range of themes that are critical to the conceptualization, formulation, implementation, and evaluation of public health policies and management strategies. These include, but are not limited to, healthcare delivery systems, health economics, and healthcare legislation, all seen through the lenses of legal principles, medical knowledge, and organizational contexts.

Social and Behavioral Sciences

The Social and Behavioral Sciences concentration prepares individuals to use social science and behavioral theory and an array of methodological approaches to understand and address the social and behavioral determinants of health and illness on the population level. The curriculum provides students with rigorous training in foundational social and behavioral theory, quantitative and qualitative research methods, and intervention and implementation science. Upon completion of the program, graduates will be equipped to conduct independent scholarly

research in academic and research settings and translate that knowledge to solve pressing public health challenges.

Admissions

All applicants are required to submit the following:

- SOPHAS application form, select a single area of concentration from four different areas of study
- 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 (TOEFL iBT or IELTS Academic) 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.
 - International students requiring a visa to attend NYU must complete the IELTS exam in person at an authorized test center. If you are required to take the exam but will not need it for visa purposes you may choose to take it online or at a test center.
- Writing sample / Publication (must be sole author or first author among multiple)
- Personal interview

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.

Course	Title	Credits
GPH-GU 2106	Epidemiology	3
GPH-GU 2995	Biostatistics for Public Health	3
GPH-GU 2110	Health Care Policy	2
GPH-GU 2112	Public Health Management and Leadership	2
GPH-GU 2140	Global Issues in Social & Behavioral Health	3
GPH-GU 2153	Global Environmental Health	3

Degree Requirements

The Public Health PhD requires 72 credits, including 30 doctoral research credits.

Biostatistics

Course	Title	Credits
Required Courses		
GPH-GU 2930	Epidemiological Methods and Design	3
GPH-GU 3020	Evidence-Based Public Health & Systematic Review Best Practices	0
GPH-GU 2450	Intermediate Epidemiology ¹	3
GPH-GU 3050	Methods in Community Health Research	3
GPH-GU 3000	Perspectives in PublicHealth: Doctoral Seminar I	1.5
GPH-GU 3010	Perspectives in Public Health: Doctoral Seminar II	1.5

GPH-GU 3353	Regression I: Linear Regression and Modeling	3
GPH-GU 3354	Regression II: Categorical Data Analysis	3
GPH-GU 3960	Theories in Public Health Practice & Research	3
GPH-GU 5170	Introduction to Public Health	0
GPH-GU 3015	Doctoral Research (repeated, for a total of 30 credits)	30
GPH-GU 3165	Research Ethics	3
GPH-GU 3200	Dissertation Proposal Seminar	3

Concentration Courses

GPH-GU 3225	Statistical Inference	3
GPH-GU 2363	Causal Inference: Design and Analysis	3

Concentration Electives

Select three of the following:	9
GPH-GU 3368 Applied Survival Analysis	
GPH-GU 2480 Longitudinal Analysis of Public Health Data	
GPH-GU 3338 Machine Learning in Public Health	
GPH-GU 3372 Applied Bayesian Analysis in Public Health	

² 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 courses listed.

³ Students will identify a specialization area (e.g. chronic disease epidemiology, mental health epidemiology, etc.) and take three courses in their specialization area.

Global Environmental Health

Course	Title	Credits
Required Courses		
GPH-GU 2930	Epidemiological Methods and Design	3
GPH-GU 3020	Evidence-Based Public Health & Systematic Review Best Practices	0
GPH-GU 2450	Intermediate Epidemiology ¹	3
GPH-GU 3050	Methods in Community Health Research	3
GPH-GU 3000	Perspectives in PublicHealth: Doctoral Seminar I	1.5
GPH-GU 3010	Perspectives in Public Health: Doctoral Seminar II	1.5
GPH-GU 3353	Regression I: Linear Regression and Modeling	3
GPH-GU 3354	Regression II: Categorical Data Analysis	3
GPH-GU 3960	Theories in Public Health Practice & Research	3
GPH-GU 5170	Introduction to Public Health	0
GPH-GU 3015	Doctoral Research (repeated, for a total of 30 credits)	30
GPH-GU 3165	Research Ethics	3
GPH-GU 3200	Dissertation Proposal Seminar	3
Concentration Courses		
GPH-GU 3120	Navigating the Landscape of Global Health: Understanding Challenges and Solutions	3
EHSC-GA 1010	Global Climate Change, Air Pollution, and Health	4
GPH-GU 3347	Tackling Global Health Disparities through Implementation	3
Concentration Electives		
Select two additional concentration electives, by advisement		5
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.

Epidemiology

Course	Title	Credits
Required Courses		
GPH-GU 2930	Epidemiological Methods and Design	3
GPH-GU 3020	Evidence-Based Public Health & Systematic Review Best Practices	0
GPH-GU 2450	Intermediate Epidemiology ¹	3
GPH-GU 3050	Methods in Community Health Research	3
GPH-GU 3000	Perspectives in PublicHealth: Doctoral Seminar I	1.5
GPH-GU 3010	Perspectives in Public Health: Doctoral Seminar II	1.5
GPH-GU 3353	Regression I: Linear Regression and Modeling	3
GPH-GU 3354	Regression II: Categorical Data Analysis	3
GPH-GU 3960	Theories in Public Health Practice & Research	3
GPH-GU 3015	Doctoral Research (repeated, for a total of 30 credits)	30
GPH-GU 3165	Research Ethics	3
GPH-GU 3200	Dissertation Proposal Seminar	3
GPH-GU 5170	Introduction to Public Health	0

Concentration Courses

Select two of the following courses:	2
GPH-GU 3152 Advanced Agent-Based Modeling	
GPH-GU 3374 Advanced Epidemiological Methods: Evaluation of Epidemiological Studies	
GPH-GU 3275 Practical Applications in Epidemiology	

Specialization Area

Select 9 specialization credits ³	9
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.

Public Health Policy and Management

Course	Title	Credits
Required Courses		
GPH-GU 2930	Epidemiological Methods and Design	3
GPH-GU 3020	Evidence-Based Public Health & Systematic Review Best Practices	0
GPH-GU 2450	Intermediate Epidemiology ¹	3
GPH-GU 3050	Methods in Community Health Research	3
GPH-GU 3000	Perspectives in PublicHealth: Doctoral Seminar I	1.5
GPH-GU 3010	Perspectives in Public Health: Doctoral Seminar II	1.5
GPH-GU 3353	Regression I: Linear Regression and Modeling	3
GPH-GU 3354	Regression II: Categorical Data Analysis	3
GPH-GU 3960	Theories in Public Health Practice & Research	3
GPH-GU 5170	Introduction to Public Health	0

GPH-GU 3015	Doctoral Research (repeated, for a total of 30 credits)	30	GPH-GU 3015	Doctoral Research (repeated, for a total of 30 credits)	30
GPH-GU 3165	Research Ethics	3	GPH-GU 3165	Research Ethics	3
GPH-GU 3200	Dissertation Proposal Seminar	3	GPH-GU 3200	Dissertation Proposal Seminar	3
Concentration Courses					
GPH-GU 3110	Advanced Public Health Policy & Management	3	GPH-GU 3260	Complex Systems, Disasters, and the Social Ecology of Health	3
GPH-GU 3185	Health Services and Policy Research	3	GPH-GU 3234	Designing Innovative Behavioral Interventions for Public Health Impact	3
GPH-GU 3240	Organizational Theory and Behavior in Health Care	3	GPH-GU 3210	Qualitative Analysis: Interviewing and Mixed Methods Approaches	3
Electives					
Select 6 elective credits from the list below, or courses chosen in consultation with an advisor or concentration director		6	Specialization Area		
PADM-GP 2172	Advanced Empirical Methods		Select two specialization courses, by advisement, from the following: 6-8		
MGMT-GB 3381	Adv Resrch in Orgnz Behav		GPH-GU 3372	Applied Bayesian Analysis in Public Health	
GPH-GU 3372	Applied Bayesian Analysis in Public Health		GPH-GU 3368	Applied Survival Analysis	
GPH-GU 3368	Applied Survival Analysis		GPH-GU 2363	Causal Inference: Design and Analysis	
GPH-GU 2135	Dissemination and Implementation Science in Health Care and Public Health		GPH-GU 2135	Dissemination and Implementation Science in Health Care and Public Health	
PADM-GP 2171	Evaluating Programs and Policies		GPH-GU 2480	Longitudinal Analysis of Public Health Data	
GPH-GU 2480	Longitudinal Analysis of Public Health Data		APSTA-GE 2042	Multi-Level Modeling: Nested Data/Longitudinal Data	
GPH-GU 3338	Machine Learning in Public Health		GPH-GU 2225	Psychometric Measurement and Analysis in Public Health Research and Practice	
CORE-GP 1018	Microeconomics		GPH-GU 2387	Survey Design, Analysis, and Reporting	
APSTA-GE 2042	Multi-Level Modeling: Nested Data/Longitudinal Data		Total Credits		
GPH-GU 3210	Qualitative Analysis: Interviewing and Mixed Methods Approaches		72		
MGMT-GB 3387	Organization Theory				
APSY-GE 2524	Psychological Measurement		1 Required only for students who have not taken an equivalent intermediate level course in epidemiology and have obtained permission to waive this course.		
GPH-GU 2225	Psychometric Measurement and Analysis in Public Health Research and Practice		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.		
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.

Social and Behavioral Sciences

Course	Title	Credits
Required Courses		
GPH-GU 2930	Epidemiological Methods and Design	3
GPH-GU 3020	Evidence-Based Public Health & Systematic Review Best Practices	0
GPH-GU 2450	Intermediate Epidemiology ¹	3
GPH-GU 3050	Methods in Community Health Research	3
GPH-GU 3000	Perspectives in PublicHealth: Doctoral Seminar I	1.5
GPH-GU 3010	Perspectives in Public Health: Doctoral Seminar II	1.5
GPH-GU 3353	Regression I: Linear Regression and Modeling	3
GPH-GU 3354	Regression II: Categorical Data Analysis	3
GPH-GU 3960	Theories in Public Health Practice & Research	3
GPH-GU 5170	Introduction to Public Health	0

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.

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.

Year	Coursework
One	Systematic literature review
Two	Candidacy Exam (Summer after year two)
Three	Defend dissertation proposal
Four/Five	Dissertation defense

Program Sequence

Course	Title	Credits
1st Semester/Term		
GPH-GU 3960	Theories in Public Health Practice & Research	3
GPH-GU 3000	Perspectives in PublicHealth: Doctoral Seminar I	1.5
GPH-GU 3020	Evidence-Based Public Health & Systematic Review Best Practices	0
GPH-GU 3015	Doctoral Research	1.5-6
GPH-GU 5170	Introduction to Public Health	0
Credits		
2nd Semester/Term		
GPH-GU 3353	Regression I: Linear Regression and Modeling	3
GPH-GU 3010	Perspectives in Public Health: Doctoral Seminar II	1.5
GPH-GU 3050	Methods in Community Health Research	3
GPH-GU 2450	Intermediate Epidemiology ¹	3
Concentration course ²		3
GPH-GU 3015	Doctoral Research	1.5-6
Credits		
3rd Semester/Term		
GPH-GU 3354	Regression II: Categorical Data Analysis	3
GPH-GU 2930	Epidemiological Methods and Design	3
Concentration course ²		3
Concentration course ²		3
GPH-GU 3015	Doctoral Research	1.5-6
Credits		
4th Semester/Term		
GPH-GU 3200	Dissertation Proposal Seminar	3
Concentration course ²		3
Concentration course ²		3
GPH-GU 3015	Doctoral Research	1.5-6
Credits		
5th Semester/Term		
GPH-GU 3015	Doctoral Research	1.5-6
Credits		
6th Semester/Term		
GPH-GU 3015	Doctoral Research	1.5-6
Credits		

7th Semester/Term	Doctoral Research	1.5-6
Credits		
8th Semester/Term		
GPH-GU 3015	Doctoral Research	1.5-3
Credits		
9th Semester/Term		
GPH-GU 3015	Doctoral Research	1.5
Credits		
10th Semester/Term		
GPH-GU 3015	Doctoral Research	1.5
Credits		
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 See Curriculum (p.) page for concentration course requirements for specific concentrations; additional electives may be considered in consultation with the department chair and/or faculty mentor.

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. Utilize statistical methods and software for optimal analysis of public health and biomedical research studies.
4. Interpret statistical results from data analyses of public health and biomedical studies.
5. Communicate biostatistical principles and methods to researchers and trainees in public health and biomedical sciences.
6. Interpret the implications of structural racism and discrimination on study results and their potential to influence the interpretation of data and societal outcomes.

Epidemiology

1. Demonstrate mastery in the ability to systematically evaluate and synthesize the strengths and weaknesses of the epidemiologic literature about health and health inequities.
2. Demonstrate a comprehensive knowledge and understanding of the theoretical and practical foundations of traditional as well as new epidemiologic study designs.
3. Formulate novel and testable research hypotheses and design appropriate epidemiologic investigations that can address important knowledge gaps and health inequities about a public health issue.
4. Demonstrate a high-level ability in employing traditional as well as cutting-edge analytic techniques to appropriately analyze epidemiologic data to understand the drivers of health inequities.
5. Provide evidence of excellent oral (via presentations at conferences) and written (via submission of manuscripts for publication and involvement in grant writing activities) skills.
6. Design and present an 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. Critically assess major theories, trends, and debates in the social and behavioral sciences literature regarding health.
2. Develop skills used to choose appropriate research designs and statistical methods for answering public health questions in the field of social and behavioral sciences.
3. Design rigorous and ethical research studies that examine theories or conceptual models relevant to the social and behavioral sciences.
4. Assess the means by which the social determinants of health create challenges to achieving health equity at the behavioral, community & societal levels.
5. Apply knowledge from a social science specialization (sociology, political science, psychology, anthropology) to a public health problem.
6. Communicate social and behavioral health theories, concepts, and scholarship in oral and written form.

Policies**Grading Policy**

Courses taken for the PhD must be completed with a grade of C or better.

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/>).