

 <p><b>Milken Institute School of Public Health</b></p> <p>THE GEORGE WASHINGTON UNIVERSITY</p>	<p><b>Department of Global Health</b></p> <p><b>Master of Public Health</b> <b>Global Health Epidemiology and Disease Control</b></p> <p><b>Program Guide</b> <b>2024-2025</b></p>
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**Program Director:**

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**Mission:**

The mission of the Global Health Epidemiology and Disease Control Program is to prepare the next generation of global health professionals to develop and rigorously appraise programs for the control of infectious and chronic diseases as well as injuries informed by a thorough assessment of the best available evidence. This will provide students with requisite skills to effectively contribute to improved program performance, and better decisions and policies for investment of scarce resources in low- and middle-income countries and in underserved communities around the world.

**Goals:**

The goals of the Global Health Epidemiology and Disease Control Program are to prepare students to be applied epidemiologists in public health program implementation and evaluation who know how to:

- Utilize epidemiological tools to generate evidence on interventions targeted to infectious and chronic disease/injury control.
- Work within real-world settings to strengthen methodological rigor of program priority setting and evaluation.
- Generate and use data for assessing burden of disease, determining efficacy and effectiveness of interventions for infectious/chronic diseases and injuries.
- Translate evidence to support program and health systems improvements and policy recommendations.
- Communicate the results of research to a broad set of constituents.

**Program Competencies:**

- Conduct and interpret data analyses from epidemiological studies to address research questions.  
Relevant courses:
  - PUBH 6853 Stat Packages/Data Management & Data Analysis
  - PUBH 6252 Epidemiologic Methods 2 Advanced Epidemiologic Methods
- Plan and design epidemiologic studies including observational and experimental designs  
Relevant courses:
  - PUBH 6247 Epidemiologic Methods 1: Design of Health Studies
  - PUBH 6252 Epidemiologic Methods 2: Advanced Epidemiologic Methods
- Interpret and critique research and best practices to inform the development of evidence-based

solutions for global health challenges.

Relevant courses:

- PUBH 6486 Global Health Programs and Approaches to the Control of Infectious Diseases
- PUBH 6492 Global Health Programs and Approaches to the Control of Chronic Diseases
- PUBH 6047 Systematic Reviews to Synthesize Evidence in Public Health Practice

- Analyze multilevel determinants in global health problems that form the basis for disease control strategies and interventions.

Relevant courses:

- PUBH 6486 Global Health Programs and Approaches to the Control of Infectious Diseases
- PUBH 6492 Global Health Programs and Approaches to the Control of Chronic Diseases

- Apply multidisciplinary perspectives to identify, analyze, and address global health challenges.

Relevant courses:

- PUBH 6400 Global Health Frameworks
- PUBH 6492 Global Health Programs and Approaches to the Control of Chronic Diseases

- Analyze the ethical issues of global health programs, policies and research.

Relevant courses:

- PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs
- PUBH 6423 Ethics in Public Health Practice and Policy

### **Program Requirements:**

*Please make sure to follow the program guide for the academic year in which you matriculated into the program.*

MPH students who select the MPH in Global Health Epidemiology and Disease Control enroll in Core Courses (19 credits), Program-Specific Courses (17 credits), and general electives (9 credits). The total 45 credit degree program includes a Culminating Experience (2 credits) where students apply their didactic education in a real-world setting.

# Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

## Department of Global Health

### Master of Public Health Global Health Epidemiology and Disease Control

#### Program-at-a Glance 2024-2025

Course#	Required Core Course	Credits	Semesters Offered	
			Residential	Online
PUBH 6002	Biostatistical Applications for Public Health	3	Fall, Sp, Sum	All
PUBH 6003	Principles and Practice of Epidemiology	3	Fall, Sp, Sum	All
PUBH 6007	Social and Behavioral Approaches to Public Health	2	Fall, Sp, Sum	All
PUBH 6009	Fundamentals of Program Evaluation (Prerequisite: 6007)	2	Fall, Sp, Sum	All
PUBH 6011	Environmental and Biological Foundations of Public Health	3	Fall, Sp, Sum	All
PUBH 6012	Fundamentals of Health Policy: Public Health and Healthcare	2	Fall, Sp, Sum	All
PUBH 6021	Essentials of Public Health Practice and Leadership I: Leading Self and Teams in Public Health	1	Fall, Sp, Sum	All
PUBH 6022	Essentials of Public Health Practice and Leadership II: Managing Organizations and Influencing Systems in PH (Prerequisite: PUBH 6021)	1	Fall, Sp, Sum	All
PUBH 6023	Interprofessional Education Experience (Prerequisite: 6002, 6003, 6007, 6011, 6012, 6021 OR 20 credit hours completed)	0	Fall, Sp, Sum	All
PUBH 6418	GH Culminating Experience I: Proposal Development (Prerequisite: 6002, 6003, 6400, 6247, 6853; corequisite 6416/6423, 6486, 6492)	1	Fall, Sp, Sum	
PUBH 6419	GH Culminating Experience II (Prerequisite: 6418, 6416 OR 6423, 6486, 6492)	1	Fall, Sp, Sum	
PUBH 6000	MPH Applied Practice Experience (Prerequisite: 6002, 6003, 6021, 6400, 6416 OR 6423, 6247, 6853)	0	Fall, Sp, Sum	n/a
<b>Total Core Credits</b>		<b>19</b>		
Course #	Required Departmental Courses	Credits	Semesters Offered	
			Residential	Online
PUBH 6400	Global Health Frameworks	2	Fall	Fall, Sp2
PUBH 6247	Epidemiologic Methods 1: Design of Health Studies	3	Fall, Sp	

PUBH 6252	Epidemiologic Methods 2 Advanced Epidemiologic Methods (Prerequisite: PUBH 6247)	3	Fall, Sp	
PUBH 6853	Stat Packages/ Data Management & Data Analysis (Prerequisite: PUBH 6002)	3	Fall, Sp	
PUBH 6416 OR PUBH 6243	Ethical and Cultural Issues in Global Health Research and Programs OR PUBH 6423: Ethics in Public Health Practice & Policy	1	Fall, Spr, Summer	
PUBH 6047	Systematic Reviews to Synthesize Evidence in Public Health Practice (Prerequisites PUBH 6002 and 6003)*  <i>*Students may enroll in any of the following one-credit courses during any semester to fulfill this technical skill requirement:</i> PUBH 6850: Introduction to SAS for PH Research PUBH 6851: Introduction to R for PH Research PUBH 6852: Introduction to Python for PH Research PUBH 6863: Applied Meta-Analysis	1	Fall  *Fall, Spring	
PUBH 6486	Global Health Programs and Approaches to the Control of Infectious Diseases (Prerequisite: PUBH 6003)	2	Fall	Sum, Sp1
PUBH 6492	Global Health Programs and Approaches to the Control of Chronic Diseases (Prerequisite: PUBH 6400, 6003)	2	Fall	
<b>Total Program Required Credits</b>		<b>17</b>		
Course #	Required Departmental Courses	Credits	Semesters Offered	
			Residential	Online
	A minimum of 9 credits - any PUBH graduate course			
<b>Total Elective Credits</b>		<b>9</b>		
<b>Total Degree Credits</b>		<b>45</b>		

### Graduation Requirements

1. **Graduate Credit Requirement:** 45 graduate credits are required.
2. **Course Requirements:** Successful completion of the Core Courses and the Program-Specific Courses are required.
3. **Applied Practice Experience (APEX) Requirement:** Students are required to fulfill all requirements of the Applied Practice Experience (Practicum) to receive credit for PUBH 6000.
  - The Applied Practice Experience (APEX) may be satisfied with either a practicum or, for experienced public health professionals, through an expedited portfolio review (EPR).
  - The practicum is a planned, supervised, and evaluated practice experience that aims to

- provide students with an opportunity to synthesize, integrate, and apply practical skills, knowledge, and training learned through courses, to gain applied experience in a professional public health work environment, and to work on public health practice projects that are of particular interest to you. Information about the Practicum will be introduced through school-wide Practicum Information Sessions held by the Office of Applied Public Health and through meetings with your department practicum staff and faculty.
- During the practicum, you will work at least 120 hours in the field under the supervision of the site preceptor who has agreed to directly supervise the work you are conducting. Students are required to fulfill all requirements of the 120-hour practicum to receive credit for PUBH 6000.
  - If you have had prior work experience, then you will find that the practicum provides the opportunity to hone skills or to gain new experience in a different area. However, if you have substantial public health experience relevant to your department/track, including 5+ years of full-time public health work for students after receiving your undergraduate degree, or 3+ years of full-time work for students who already have a graduate degree prior to beginning the MPH, then you may be able to satisfy the APEx requirement through an EPR instead of doing the practicum, with advanced approval by your department's practicum team.
  - Note that before completing the 120 hours practicum experience Global Health Epidemiology and Disease Control students must fulfill the following pre-requisites: 6002, 6003, 6021, 6400, 6416 OR 6423, 6247, 6853
4. **Interprofessional Education Experience (IPE):** Students are required to enroll and participate in an authorized IPE activity (PUBH 6023). All MPH students are required to select an IPE experience from a host of options provided throughout your enrollment as a MPH. The IPE is a one-time, case-based or activity-based learning experience. . It requires a 3-hour live session as well as review of materials ahead of time. The IPE experience is a way to experience working with people from other professions/programs outside of public health. Students will have many opportunities to register for this zero-credit (no fee) IPE course (PUBH 6023- Interprofessional Education Experience) and will receive credit upon successful completion. Note that students must complete 20 credits of course work before enrolling in the IPE.
  5. **Grade Point Requirement:** A 3.0 (B average) overall grade point average is required.
  6. **Time Limit Requirement:** The degree must be completed within five years.
  7. **Transfer Credit Policy:** Up to 12 graduate credits that have not been applied to a previous degree may be transferred to the MPH upon approval. Credits must have been earned from an accredited institution in the last 3 years with a grade point of 3.0 or better.
  8. **CITI Training requirement:** All students are required to complete training regarding human subject protection regulation and the Health Insurance Portability and Accountability Act of 1996 (HIPAA). To fulfill this requirement, you must complete the Collaborative IRB Training Initiative (CITI) Course in The Protection of Human Research Subjects.
  9. **Integrity Quiz & Plagiarism requirement:** All students are required to review the George Washington University Code of Academic Integrity and take the quiz within their first semester of study. The Code of Integrity and step-by-step instructions can be found here: <http://publichealth.gwu.edu/integrity>
  10. **Professional Enhancement requirement:** Students must participate in 8 hours per degree

program of advisor pre-approved Public Health-related lectures, seminars, and symposia, related to your field of study. Students must submit documentation of Professional Enhancement activities to the Office of Student Records. The documentation consists of the Professional Enhancement Form <http://publichealth.gwu.edu/academics/forms>

**The Department of Global Health**  
**Global Health Epidemiology and Disease Control MPH Program Course Mapping Example**  
**2024-2025**

The following are advising tips relating to course sequencing:

- All students must take PUBH 6400 *Global Health Frameworks*, PUBH 6003 *Principles and Practice of Epidemiology*, and PUBH 6002 *Biostatistical Applications for Public Health* during their first fall semester. These are prerequisites for many required and elective courses. Failure to take these courses in your first semester will delay your plan of study.
- PUBH 6247 *Design of Health Studies* is a prerequisite for PUBH 6252 *Advanced Epidemiological Methods*
- PUBH 6003 *Principles and Practices of Epidemiology* and PUBH 6400 *Global Health Frameworks* are prerequisites for PUBH 6486 *Global Health Programs and Approaches to the Control of Infectious Diseases* and
- PUBH 6003 *Principles and Practices of Epidemiology* and PUBH 6400 *Global Health Frameworks* are prerequisites for PUBH 6492 *Global Health Programs and Approaches to the Control of Chronic Diseases*

The Global Health Epidemiology and Disease Control program contains a total of 9 elective credits that can be chosen from any PUBH graduate-level course. Elective courses are often offered once per year, so students should plan which courses to take in advance. The ‘Elective Course(s)’ credits listed in the below course maps indicate the suggested distribution of these elective credits, but students can choose to distribute them however they feel fit. Students are advised to work with their advisor when deciding on electives.

The following is a non-exhaustive list of electives that GH Epidemiology students have taken in the past:

### 1 Credit

- PUBH 6231 *Epidemiology of Drug and Vaccine Safety*
- PUBH 6234 *Epidemiologic Methods in Neglected Tropical Disease Control*
- PUBH 6238 *Molecular Epidemiology*
- PUBH 6239 *Epidemiology of Foodborne and Waterborne Diseases*
- PUBH 6240 *Pediatric HIV/AIDS*
- PUBH 6243 *Topics in Clinical Epidemiology and Public Health: Reading the Research*
- PUBH 6262 *Introduction to Geographic Information Systems*
- PUBH 6269 *Reproductive Epidemiology*
- PUBH 6270 *HIV/AIDS Surveillance*
- PUBH 6487 *Emerging Zoonotic and Global Food Production*

### 2 Credits

- PUBH 6132 *Water, Sanitation, and Hygiene (WASH) in Low-Income Countries*
- PUBH 6230 *Epidemiology of Psychiatric Disorders*
- PUBH 6241 *Nutritional Epidemiology*
- PUBH 6242 *Clinical Epidemiology and Public Health: Reading the Research*
- PUBH 6244 *Cancer Epidemiology*
- PUBH 6245 *Infectious Disease Epidemiology*
- PUBH 6250 *Epidemiology of HIV/AIDS*
- PUBH 6255 *Organization Responses to the Local, National, and Global HIV/AIDS Epidemics*
- PUBH 6259 *Epidemiology Surveillance in Public Health*
- PUBH 6275 *Essential Public Health Laboratory Skills*
- PUBH 6279 *Next Generation Sequencing Laboratory Skills*
- PUBH 6480 *Public Health in Humanitarian Settings*
- PUBH 6481 *Global Mental Health*
- PUBH 6484 *Prevention and Control of Vector Borne Diseases*
- PUBH 6534 *Community-Based Participatory Research*
- PUBH 6563 *Global Child Health*

### 3 Credits

- PUBH 6276 *Public Health Microbiology*
- PUBH 6278 *Public Health Virology*
- PUBH 6291 *Infection and Immunity*
- PUBH 6455 *Global Vaccinology*
- PUBH 6861 *Public Health Genomics*



**Example 1: This schedule is fast paced and suggested for students that are confident in their academic and quantitative abilities. This schedule allows for students to spend their final spring semester working domestically or abroad.**

1 <sup>st</sup> year Fall		1 <sup>st</sup> year Spring		1 <sup>st</sup> year Summer	
	Credits		Credits		Credits
6400 Global Health Frameworks	2	6007 Social & Behavioral Approaches to Health	2	6009 Fundamentals of Program Evaluation	2
6002 Biostatistical Applications for Public Health	3	6247 Epidemiologic Methods 1 Design of Health Studies	3	6011 Environmental and Biological Foundations of Public Health	3
6003 Principles and Practice of Epidemiology	3	6853 Stat Packages/Data Management & Data Analysis	3	Elective(s)	2
6012 Fundamentals of Health Policy: Public Health and Healthcare	2	Elective(s)	3		
6021 Leading Self and Teams in Public Health	1	6022 Managing Organizations and Influencing Systems in PH	1	**Eligible to do your MPH Applied Practice Experience	
Ethics requirement (6416 or 6243)	1				
<b>Total semester credits</b>	<b>12</b>	<b>Total semester credits</b>	<b>12</b>	<b>Total semester credits</b>	<b>7</b>
2 <sup>nd</sup> year Fall		2 <sup>nd</sup> year Spring		2 <sup>nd</sup> year Summer	
6252 Epidemiologic Methods 2 Advanced Epidemiologic Methods	3	6419 GH Culminating Experience I	1	Many students choose to finish their CE or practical hours over the summer.	
6486 Global Health Programs and Approaches to the Control of Infectious Diseases	2	6023 Interprofessional Education Experience	0		
6492 Global Health Programs and Approaches to the Control of Chronic Diseases	2	Elective(s)	2		
6418 GH Culminating Experience I: Proposal Development	1				
6047 Systematic Reviews to synthesize evidence in public health practice	1				
Elective(s)	2				
<b>Total semester credits</b>	<b>11</b>	<b>Total semester credits</b>	<b>3</b>	<b>Total semester credits</b>	

**Example 2: This schedule is slower paced and recommended for students that are working more, just returning to school, or would generally enjoy a slower paced program.**

1 <sup>st</sup> year Fall		1 <sup>st</sup> year Spring		1 <sup>st</sup> year Summer	
	Credits		Credits		Credits
6400 Global Health Frameworks	2	Ethics requirement (6416 or 6243)	1	6011 Environmental and Biological Foundations of Public Health	3
6002 Biostatistical Applications for Public Health	3	6247 Epidemiologic Methods 1 Design of Health Studies	3	Elective(s)	2
6003 Principles and Practice of Epidemiology	3	6853 Stat Packages/Data Management & Data Analysis	3	6022 Managing Organizations and Influencing Systems in PH	1
6021 Leading Self and Teams in Public Health	1	6007 Social & Behavioral Approaches to Health	2	**Eligible to do your MPH Applied Practice Experience	
<b>Total semester credits</b>	<b>9</b>	<b>Total semester credits</b>	<b>9</b>	<b>Total semester credits</b>	<b>6</b>
2 <sup>nd</sup> year Fall		2 <sup>nd</sup> year Spring		2 <sup>nd</sup> year Summer	
6252 Epidemiologic Methods 2 Advanced Epidemiologic Methods	3	6012 Fundamentals of Health Policy: Public Health and Healthcare	2	6419 GH Culminating Experience II	1
6486 Global Health Programs and Approaches to the Control of Infectious Diseases	2	6009 Fundamentals of Program Evaluation	2	6023 Interprofessional Education Experience	0
6492 Global Health Programs and Approaches to the Control of Chronic Diseases	2	6418 GH Culminating Experience I: Proposal Development	1		
6047 Systematic Reviews to synthesize evidence in public health practice	1	Elective(s)	5		
Elective(s)	2				
<b>Total semester credits</b>	<b>10</b>	<b>Total semester credits</b>	<b>10</b>	<b>Total semester credits</b>	<b>1</b>

**Example 3: Part-time student schedule. This schedule is recommended for part-time students. We recommend that students who will be working full- time attend the program part-time.**

1 <sup>st</sup> year Fall		1 <sup>st</sup> year Spring		1 <sup>st</sup> year Summer	
	Credits		Credits		Credits
6400 Global Health Frameworks	2	6002 Biostatistical Applications for Public Health	3	6011 Environmental and Biological Foundations of Public Health	3
6003 Principles and Practice of Epidemiology	3	6247 Epidemiologic Methods 1 Design of Health Studies	3	6007 Social & Behavioral Approaches to Health	2
6021 Leading Self and Teams in Public Health	1				
<b>Total semester credits</b>	<b>6</b>	<b>Total semester credits</b>	<b>6</b>	<b>Total semester credits</b>	<b>5</b>
2 <sup>nd</sup> year Fall		2 <sup>nd</sup> year Spring		2 <sup>nd</sup> year Summer	
6486 Global Health Programs and Approaches to the Control of Infectious Diseases	2	6853 Stat Packages/Data Management & Data Analysis	3	6012 Fundamentals of Health Policy: Public Health and Healthcare	2
6492 Global Health Programs and Approaches to the Control of Chronic Diseases	2	Ethics requirement (6416 or 6243)	1	6009 Fundamentals of Program Evaluation	2
Elective(s)	2	Elective(s)	2	6022 Managing Organizations and Influencing Systems in PH	1
				**Eligible to do your MPH Applied Practice Experience	
<b>Total semester credits</b>	<b>6</b>	<b>Total semester credits</b>	<b>6</b>	<b>Total semester credits</b>	<b>5</b>
3 <sup>rd</sup> year Fall		3 <sup>rd</sup> year Spring		3 <sup>rd</sup> year Summer	
6252 Epidemiologic Methods 2 Advanced Epidemiologic Methods	3	6418 GH Culminating Experience I: Proposal Development	1	6419 GH Culminating Experience II	1
6047 Systematic Reviews to synthesize evidence in public health practice	1	Elective(s)	3		
Elective(s)	2	6023 Interprofessional Education Experience	0		
<b>Total semester credits</b>	<b>6</b>	<b>Total semester credits</b>	<b>4</b>	<b>Total semester credits</b>	<b>1</b>