# Milken Institute School of Public Health

THE GEORGE WASHINGTON UNIVERSITY

## **Department of Global Health**

# Masters of Public Health Global Health Epidemiology and Disease Control

Program-at-a-Glance 2017-2018

#### **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 common epidemiological tools to generate evidence on interventions targeted to infectious and chronic disease 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 and chronic diseases.
- 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**

#### Department Competencies and Program-Specific Competencies:

1. Apply epidemiological and multi-disciplinary concepts to identify, analyze and address global health challenges including burden of illness and the determinants and distribution disease in populations.

#### Relevant courses:

- PUBH 6400 Global Health Frameworks
- PUBH 6247 Design of Health Studies

2. Select the appropriate qualitative and/or quantitative methods depending on the specific research or programmatic need and apply underlying principles to design and conduct such studies including observational and experimental designs, screening programs, and public health surveillance.

#### Relevant courses:

- PUBH 6247 Design of Health Studies
- PUBH 6249 Stat Packages/Data Management & Data Analysis
- PUBH 6252 Advanced Epidemiology Methods
- PUBH 6411 Global Health Qualitative Research Methods
- 3. Apply appropriate data analysis methods and interpret the results from epidemiological studies.

#### Relevant courses:

- PUBH 6247 Design of Health Studies
- PUBH 6249 Stat Packages/Data Management & Data Analysis
- PUBH 6252 Advanced Epidemiology Methods
- 4. Interpret and critique research and best practices to inform the development of evidence-based solutions for global health challenges.

#### Relevant courses:

- PUBH 6247 Design of Health Studies
- PUBH 6252 Advanced Epidemiology Methods
- PUBH 6411 Global Health Qualitative Research Methods
- 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
- 5. Communicate evidence on global health topics to a variety of audiences including technical experts, policymakers, lay audiences, and other relevant stakeholders.

#### Relevant courses:

- PUBH 6400 Global Health Frameworks
- PUBH 6014 Practicum
- PUBH 6015 Culminating Experience
- 6. Work in a multidisciplinary team to identify and address 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 6400 Global Health Frameworks
- 7. Engage with diverse individuals, organizations, and communities with respect for different values,

### beliefs and practices.

#### Relevant courses:

- PUBH 6416 Ethical and Cultural Issues in Global Health Research and Programs
- 8. Analyze multilevel determinants of problems in global health that form the basis for disease control strategies and interventions.

#### Relevant courses:

- PUBH 6400 Global Health Frameworks
- 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

### **Program Requirements:**

MPH students who select the MPH in Global Health Epidemiology and Disease Control enroll in Core Courses (15 credits), Program-Specific Courses (18 credits), and general electives (8 credits). The total 45 credit degree program also includes a Practicum (2 credits) and a Culminating Experience (2 credits) where students apply their didactic education in a real world setting.

# Departments of Global Health and Epidemiology & Biostatistics Global Health Epidemiology and Disease Control MPH

# **Program Requirements 2017-2018**

Course Number	Course Name	Credits	Semester Offered	Grade				
REQUIRED MPH CORE COURSES								
PUBH 6001	Biological Concepts for Public Health	2	Fall, Spring, Summer I					
PUBH 6002	Biostatistical Applications for Public Health	3	Fall, Spring, Summer 10 wk					
PUBH 6003	Principles and Practice of Epidemiology	3	Fall, Spring, Summer 10 wk					
PUBH 6004	Environmental and Occupational Health in a Sustainable World	2	Fall, Spring, Summer I					
PUBH 6006	Management and Policy Approaches to Public Health	3	Fall, Spring, Summer 10 wk					
PUBH 6007	Social and Behavioral Approaches to Public Health	2	Fall, Spring, Summer I					
Total	Core Credits	15						
REQUIRED PROGRAM SPECIFIC COURSES								
PUBH 6400	Global Health Frameworks	2	Fall					
PUBH 6247	Design of Health Studies	3	Fall, Spring					
PUBH 6252	Advanced Epidemiologic Methods	3	Fall, Spring					
PUBH 6249	Stat Packages/Data Management & Data Analysis	3	Fall, Spring					
PUBH 6411	Global Health Qualitative Research Methods	2	Spring, Summer					
PUBH 6416	Ethical and Cultural Issues in Global Health Research and Programs	1	Fall, Spring					
PUBH 6486	Global Health Programs and Approaches to the Control of Infectious Diseases	2	Fall					
PUBH 6492	Global Health Programs and Approaches to the Control of Chronic Diseases	2						
Total	Total Program Required Credits	18						

ELECTIVE COURSES							
A minimum of 8 credits – any PUBH graduate course. Sample list below:							
PUBH 6563	Global Child Health	2	Fall				
PUBH 6484	Prevention and Control of Vector Borne Diseases	2	Fall				
PUBH 6487	Emerging Zoonotic Diseases and Global Food Production	1	Fall				
PUBH 6245	Infectious Disease Epidemiology	2	Spring				
PUBH 6250	Epidemiology of HIV/AIDS	2	Fall				
PUBH 6253	Issues in HIV Care & Treatment	1	Fall				
PUBH 6240	Pediatric HIV/AIDS	1	Summer 1				
PUBH 6270	HIV/AIDS Surveillance	1	Fall				
PUBH 6255	Organizational Responses to the Local, National, and Global HIV/AIDS Epidemics	2	Spring				
PUBH 6259	Epidemiologic Surveillance in Public Health	2	Spring				
PUBH 6244	Cancer Epidemiology	2	Spring				
PUBH 6481	Global Mental Health	2	Spring				
PUBH 6269	Reproductive and Perinatal Epidemiology	1	Summer 1				
PUBH 6262	Introduction to Geographical Information Systems	1	Fall, Spring, Summer 1				
PUBH 6480	Public Health in Complex Emergencies	2	Fall				
PUBH 6501	Evaluation of Health Promotion and Disease Prevention Programs	3	Fall, Spring				
PUBH 6132	Design, Implementation, and Evaluation of Global Water, Sanitation, and Hygiene (WASH) Programs	1	Fall				
PUBH 6242	Clinical Epidemiology and Decision Analysis	2	Spring				
PUBH 6243	Topics in Clinical Epidemiology	1	Spring				

	Other PUBH graduate electives may be used to satisfy this requirement.					
Total	Total Elective Credits	8				
PRACTICUM AND CULMINATING EXPERIENCE						
PUBH 6014.14	Practicum	2	Fall, Spring, Summer			
PUBH 6015.14	Culminating Experience	2	Fall, Spring, Summer			
Total	Practicum and Culminating Experience	4				
TOTAL	DEGREE CREDITS	45				

# The Department of Global Health Global Health Epidemiology and Disease Control MPH Program Course Mapping Example 2017-2018

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.

The Global Health Epidemiology and Disease Control program contains a total of 7 electives credits that must be chosen from the list of elective courses provided in the program guide or approved by your advisor. 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.

1 <sup>st</sup> year Fall		1st year Spring		1 <sup>st</sup> year Summer	
	Credits		Credits		Credits
6400 Global Health Frameworks	3	6416 Ethical and Cultural Issues in Global Health Research & Programs	1	6411 Global Health Qualitative Research Methods	2
6002 Biostatistical Applications for Public Health	3	6006 Management and Policy Approaches to Public Health	3	6004 Environmental and Occupational Health	2
6003 Principles and Practice of Epidemiology	3	6249 Stat Packages/Data Management & Data Analysis	3	6007 Social & Behavioral Approaches to Health	2
6001 Biological Concepts for Public Health	2	Elective Course(s)	2-4	Elective Course	1-2
Elective Course	1				
Total semester credits	12	Total semester credits	9-11	Total semester credits	7-8
2nd year Fall		2 <sup>nd</sup> year Spring		2 <sup>nd</sup> year Summer	
6014 Practicum	2	6015 Culminating Experience	2		
6247 Design of Health Studies	3	6252 Advanced Epidemiologic Methods	3		
6486 Global Health Programs and Approaches to the Control of Infectious Diseases	2	Elective Course	2		
6499 Global Health Programs and Approaches to the Control of Chronic Diseases	2				
Elective Course	2				
Total semester credits	11	Total semester credits	5-7	Total semester credits	