## INTERNATIONAL HEALTH, MSPH

## MASTER OF SCIENCE IN PUBLIC HEALTH DEPARTMENT OF INTERNATIONAL HEALTH

#### Overview

Each student is admitted into one of the four program areas approved for study leading to the Master of Science in Public Health degree in International Health (https://publichealth.jhu.edu/academics/msph-dept-of-international-health/): Global Disease Epidemiology and Control, Health Systems, Human Nutrition, or Social and Behavioral Interventions.

An academic adviser is assigned from the list of Advising Faculty in the student's program area. The Program Coordinator provides general guidance and supervision over all students in each program area.

# **Concentrations**GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL

Director: Agbessi Amouzou, PhD

Program Co-Coordinators: Elizabeth Hazel, PhD and Yvonne Tam, MHS

#### **OVERALL PROGRAM GOAL**

This program provides training for public health practitioners who will use epidemiologic, immunologic and/or laboratory and statistical methods to design, implement and/or evaluate disease control interventions for diseases of public health importance to under-served populations. Graduates will have a fundamental understanding of the pathogenesis, epidemiology, and control measures applicable to diseases of public health importance in disadvantaged populations. Interventions to be studied will be primarily biomedical (e.g. therapeutic or prophylactic drugs, vaccines, or environmental modifications), although there may be a behavioral component to the effective implementation of such interventions.

Special strengths of the program are infectious disease epidemiology (including emerging infections), vaccinology, and micronutrients. Students have the opportunity to learn from leading experts in vaccine science and policy and may take courses to complete a certificate in this area. Students can acquire a broad understanding of the methods, skills, and tools needed to design, conduct, and analyze community and clinical trials and/or laboratory-based investigations. Students will be able to provide technical assistance to public health researchers and public health managers in the design, implementation, and evaluation of programs to address public health problems facing underserved populations in the US and abroad.

#### **REQUIREMENTS FOR ADMISSION**

Students in the program ideally have a bachelor's degree in health or biological sciences or statistics. An applicant with another undergraduate degree must have satisfactorily completed courses in mathematics, biology, chemistry, physics, or another natural science.

#### **Advising Faculty**

- Smisha Agarwal
- · Nadia Akseer

- · Agbessi Amouzou
- · Naor Bar-Zeev
- · Robert Black
- · Andrea Carcelen
- · Subhra Chakraborty
- · Victoria Chou
- · William Checkley
- · Amanda Debes
- Anna Durbin
- · Daniel Erchick
- · Christine-Marie George
- · Robert Gilman
- · Laura Hammitt
- · Elizabeth Hazel
- · Anna Kalbarczyk
- · Ruth Karron
- · Joanne Katz
- · Maria Knoll
- · Rupali Limaye
- · Abdoulaye Maiga
- · Melissa Marx
- · Diwakar Mohan
- · Luke Mullany
- · Melinda Munos
- · Simon Mutembo
- · B. Aletta Nonyane
- · Jamie Perin
- Christine Prosperi
- · Andrea Ruff
- David Sack
- · Daniel Salmon
- · Ashley Sheffel
- · Anita Shet
- Kawsar Talaat
- Yvonne Tam
- Shaun TrueloveBrian Wahl
- Neff Walker

#### **HEALTH SYSTEMS**

Director: Sara Bennett, PhD

Program Coordinators: Ligia Paina, PhD and Nukhba Zia, PhD

#### **EDUCATIONAL GOALS**

Graduates of the Health Systems MSPH program will be prepared to take on leadership and management roles in health policy and planning, health financing and management, and monitoring and evaluation of health programs. Graduates will contribute to strengthening health systems through the implementation of equitable and cost-effective interventions for improving access, quality, and efficiency of health services for

underserved populations. A health-related practicum experience is an important component of this degree program.

#### **Requirements for Admission**

Students must have a degree in biological or health sciences, social sciences, or management. Some prior international or health systems experience is highly desirable.

#### **Advising Faculty**

- · Joe Ali
- · Olakunle Alonge
- · Chiara Altare
- · Abdulgafoor Bachani
- · Abdullah Bagui
- · Sara Bennett
- · William Brieger
- · Gilbert Burnham
- · Andreea Creanga
- · Shannon Doocy
- · Anbrasi Edward
- · Dustin Gibson
- · Shivam Gupta
- · Connie Hoe
- · Rasheda Khanam
- · Alain Koffi
- · Adam Koon
- · Qingfeng Li
- Maria Merritt
- · Rosemary Morgan
- · Ligia Paina
- · Bryan Patenaude
- · Krishna Rao
- · W. Courtland Robinson
- · Daniela Rodriguez
- · Mathuram Santosham
- · Meike Schleiff
- · Yusra Shawar
- · Jeremy Shiffman
- Anthony So
- · Alan Sorkin
- · Paul Spiegel
- · Antonio Trujillo
- · Andres Vecino-Ortiz
- · William Weiss

#### **HUMAN NUTRITION**

Director: Parul Christian, DrPH

Program Coordinator: Amanda Palmer, PhD

#### **EDUCATIONAL OBJECTIVES**

The MSPH program in Human Nutrition is designed to train professionals to focus on understanding and solving public health problems in food and nutrition across a diverse societal landscape. The MSPH degree in Human Nutrition prepares students to assume professional, technical, and management positions within public health nutrition programs or government, international or nongovernmental agencies, universities,

hospitals, and private industry. The program also offers a broad public health nutrition component that complements dietetics skills acquired in the combined MSPH-Dietitianietitian program (see below). The MSPH program also prepares students with a foundation of knowledge and skills for carrying out subsequent doctoral studies and research in the field of human nutrition or training in medicine.

#### **OVERALL PROGRAM GOAL**

There are four overarching academic competencies that students are expected to master during the course of their master's degree program. Students should:

- Demonstrate knowledge of public health nutrition problems and characterize these problems in terms of measurable indicators.
- Identify nutrition problems of public health importance; analyze and synthesize relevant data; and develop and implement prevention, control, and evaluation plans.
- Participate in a field, laboratory, or clinical experience related to nutrition research or programs from conception of ideas through design, management, monitoring, data collection, and analysis.
- Communicate through written reports, oral presentations, and other media nutrition information of high technical quality and program or policy relevance.

#### **Requirements for Admission**

The program seeks to attract and train future experts in public health nutrition across a range of professional interests and backgrounds. Entry into the Master of Science in Public Health (MSPH) program in Human Nutrition requires, at a minimum, a bachelor's degree or its equivalent, preferably in nutrition, biology, health or social sciences, public health, health, economics, or health policy.

#### **Advising Faculty**

- · Laura Caulfield
- · Jessica Fanzo (co-adviser)
- Joel Gittelsohn
- · Ethan Gough
- · Jean Humphrey
- · Vanessa Garcia-Larsen
- · Rebecca Heidkamp
- Kristen Hurley
- · Yunhee Kang
- · Yeeli Mui
- · Amanda Palmer
- Kerry Schulze
- · Andrew Thorne-Lyman
- · Keith P. West Jr.

#### **Program Requirements**

Students will be expected to enroll each term, satisfy the educational requirements, successfully complete a practicum experience and write a capstone. Students must also pass a written comprehensive exam. A minimum of 16 total credits of coursework per term is required. Of these, approximately 64 credits are associated with directed coursework usually completed in the first year, a minimum of 28 credits are associated with a practicum experience, and a minimum of 4 credits with a capstone usually completed during the second year.

Students are required to take specific courses in each of the four core content areas in order to develop specific competencies: Nutrition

and Health, Biochemistry and Metabolism, Research Methods, and Professional Skills. Approximately 53-course credits are associated with these core content areas common to all MSPH students. MSPH-Dietitian students are required to take an additional 12 credits of required coursework. Within these required courses, all students must complete coursework in environmental health and management sciences. To complete the remainder of their coursework requirements, students will choose elective coursework and special studies in conjunction with their adviser, depending on their unique career goals.

#### **Nutrition Practicum**

MSPH candidates complete a practicum for a minimum of 2 terms. The student, faculty adviser, and other faculty within the department or school arrange this experience, as necessary. The practicum complements and reinforces the didactic portion of the MSPH program. It provides students with an opportunity to apply the knowledge gained during the first year to develop field, laboratory, or clinical skills related to nutrition research or programs according to individually designed learning objectives and to work as part of a team in an applied research or practice project. Students are placed in a variety of professional settings, which may include: government, non-government organizations (NGOs), university projects, and multi-lateral, private, and/or the for-profit sector. Practicum locations exist in the US and in most regions of the world. Students are often placed in organizations such as WHO, the World Bank, UNICEF, Helen Keller International, USDA, Feeding America, and the Center for Livable Future. Funding or scholarship opportunities for the practicum experience include funding from the Center for Global Health at JHU, Sight and Life, and the Borlaug Foundation. In addition to providing students with a real-world opportunity to apply their knowledge, the practicum experience helps facilitate subsequent career opportunities.

#### **SOCIAL AND BEHAVIORAL INTERVENTIONS**

Director: Caitlin Kennedy, PhD

Program Co-Coordinators: Elli Leontsini, MD, MPH, and Teresa Yeh, MSPH

#### **EDUCATIONAL OBJECTIVES**

The program offers multidisciplinary training for researchers and public health practitioners who wish to use the social sciences in the design, implementation, and evaluation of public health programs, particularly community-based interventions. The program provides students with exposure to applied theory and methods from the fields of social psychology and medical anthropology and sociology. The combined use of qualitative and quantitative methods is a defining characteristic of the program.

Students may choose to specialize in the development, implementation, and evaluation of public health programs related to a given area of interest such as HIV/AIDS, maternal and child health, malaria prevention, or a host of other topical areas relevant to the enhancement of health in lower income settings. Upon completion of the program, students will be able to provide technical assistance in assessing and responding to the socio-cultural context surrounding public health interventions and in the development, implementation, and evaluation of social and behavioral change programs to improve the health of underserved communities.

The program addresses the following educational objectives:

The Evidence Base for International Health: Identify, define, and address major global health problems of underserved populations in lower-income contexts, using appropriate indicators and current best practices.

 International Health: Examine conditions faced by disadvantaged populations in lower-income contexts, principles of health equity,

- and social justice and apply a range of tools to achieve better health outcomes
- Public Health Biology: Explain biologic mechanisms and/or clinical manifestations of disease(s) impacting public health.
- Environmental Health: Discuss environmental influences on public health and appropriate risk assessment and public health response options.

**Epidemiology and Biostatistics:** Develop a solid foundation in epidemiologic and statistical research and evaluation skills applicable to public health assessment and action.

 Identify and utilize epidemiologic and biostatistics tools relevant to assessing the scope of a public health problem or the impact of public health action on a given condition.

**Social and Behavioral Interventions:** Develop the theoretical and methodological tools to gain an understanding of the socio-cultural context surrounding public health in lower-income contexts and to assist in the development, implementation, and evaluation of locally appropriate social and behavioral change programs.

- Theory and Practice: Apply relevant theories and concepts drawn from anthropology, sociology, and psychology to design effective theorydriven social and behavioral interventions to improve the health and well-being of underserved communities.
- Qualitative Methods: Develop an understanding of theoretical paradigms and perspectives informing ethnography and qualitative research and use appropriate and rigorous qualitative research methods to understand the socio-cultural context of health and inform public health action.
- Formative Research and Human Centered Design: Conduct multimethod formative research to develop locally appropriate social and behavioral interventions to improve health, including development of appropriate communication interventions in support of those strategies.

**Management and Leadership:** Apply management and leadership techniques to develop, implement and evaluate health programs including organizational and financial best practices.

**Evaluation:** Propose, conduct, or assess process and outcome evaluations of social and behavioral interventions in global health

#### **Professional Communication and Interprofessional**

**Performance:** Produce written reports of programmatic findings and/or research and communicate them via oral presentations, posters, briefs, or other official documents, intended for public health professionals and/or policymakers in audience-appropriate formats; perform effectively on interprofessional teams with local community organizations and stakeholders over the course of a project of mutual interest.

#### **Requirements for Admission**

Applicants into the program must have a bachelor's degree in the health or social sciences. Some prior international or health experience is highly desirable.

#### **Advising Faculty**

- Allison Barlow
- · William Brieger
- · Laura Beres

- · Svea Closser
- · Mary Cwik
- · Julie Denison
- · Joel Gittelsohn
- · Emily Haroz
- · Steve Harvey
- · Allison Ingalls
- · Caitlin Kennedy
- · Anne Kenney
- · Shea Littlepage
- · Kristin Masten
- · Elli Leontsini
- · Hannah Marker
- · Victoria O'Keefe
- · Hima Patel
- · Summer Rosenstock
- · Erica Rosser
- Kate Rucinski
- · Haneefa Saleem
- Pamela Surkan
- · Lauren Tingey
- · Peter Winch
- · Melissa Walls
- · Emma Waugh
- · Teresa Yeh

### Bachelor's/MSPH FOR PUBLIC HEALTH MAJORS AT JHU KRIEGER SCHOOL OF ARTS AND SCIENCES

The Department of International Health offers early graduate school admission to JHU seniors majoring in Public Health Studies. This transition program serves as a mode of entry into the following International Health MSPH degree programs:

- MSPH in Global Disease Epidemiology and Control (https://www.jhsph.edu/departments/international-health/global-health-masters-degrees/master-of-science-in-public-health/global-disease-epidemiology-control/)
- MSPH in Health Systems (https://www.jhsph.edu/departments/ international-health/global-health-masters-degrees/master-ofscience-in-public-health/health-systems/)

The Department of International Health also offers early graduate school admission to any undergraduate at JHU Krieger School of Arts and Sciences for those who apply to:

 MSPH in Social and Behavioral Interventions (https:// www.jhsph.edu/departments/international-health/global-healthmasters-degrees/master-of-science-in-public-health/social-andbehavioral-interventions/)

Students in this Program will receive co-advising from both Schools as part of this unique experience. Admitted students must complete the BA degree before formally enrolling in the degree program.

Once students complete the BA degree, admitted students will be automatically enrolled in the MSPH degree at BSPH starting that fall. The MSPH degree consists of a full year of coursework, a comprehensive written exam, and in the second year, a minimum of 4 months and a maximum of 9 months of a full-time practicum (32 credits), where students apply all their skills in a field setting, and finally fulfilling the MSPH Essay requirement. Students find practicum opportunities overseas or domestically.

Applications for the Bachelor's/MSPH degree must be submitted by July 1 between the junior and senior years to ensure completion of the review process prior to the first day of the academic year. Students must be accepted before the start of their senior year.

Standardized test scores are not required for application to the Bachelor's/MSPH program for students with a cumulative GPA of 3.3 or higher. However, a transcript is required for all prerequisite courses listed below and for all coursework through the 2nd semester of the student's junior year.

Undergraduate students applying must have completed the following coursework and have received a B or higher on each of the following:

- · AS 280.380 Global Health Principles and Practice
- AS 280.345 Public Health Biostatistics or EN 553.311 Probability and Statistics for the Biological Sciences and Engineering
- · AS 280.350 Fundamentals of Epidemiology

#### **HOW TO APPLY**

Applications for the Bachelor's/MSPH degree should be submitted by July 1 between the junior and senior years. Admitted students must complete their BA degree before formally enrolling in the Bloomberg School.

To apply, please use the SOPHAS Express Application. (https://sophasexpress.liaisoncas.com/applicant-ux/#/login)

If you have questions please email **Elisabeth Simmons** (esimmo15@jhu.edu).

### **Concurrent Degree Options**

For admitted doctoral students at the Bloomberg School of Public Health

Students admitted to a doctoral program in other departments at the Bloomberg School of Public Health have the opportunity to pursue an MSPH Degree in International Health concurrently with their doctoral program. Students must have been accepted into one of the doctoral programs at the Johns Hopkins Bloomberg School of Public Health and have approval from their department in order to apply for the MSPH in International Health in one of the following concentration areas:

- · Global Disease Epidemiology and Control
- · Health Systems
- · Human Nutrition
- · Social and Behavioral Interventions

#### **Contact Us**

Students interested in pursuing this concurrent degree option should contact Cristina Salazar (csalazar@jhu.edu) or Elisabeth Simmons (esimmo15@jhu.edu) for more information.

## **MSPH Requirements**

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

# **Program Concentration Specific Requirements**

# Global Disease Epidemiology and Control GDEC MSPH Course Requirements

All required courses must be taken for a letter grade except for courses only offered for pass/fail.

Students may choose Epidemiology Option 3 with guidance and approval from their academic adviser AND the GDEC MSPH Academic Program Coordinators. Please review the guidance from the Epidemiology Department provided during GDEC orientation to decide which Epi course option best fits.

The below courses are examples of required courses, for the most up-to-date information and an accurate required course list please view our departmental academic guide (https://www.jhsph.edu/departments/international-health/current-students/academic-guides.html) published August of each academic year.

Code Required Course		edits
General Degree Re		
PH.550.860	Academic & Research Ethics at BSPH	
PH.223.840	Special Studies and Research Disease Control (Individual Goals Analysis (IGA) (Register and select your advisor's name)	1
PH.223.801	Global Disease Epidemiology and Control Program Seminar 1	1
PH.223.802	Global Disease Epidemiology and Control Program Seminar 2	1
PH.223.803	Global Disease Epidemiology and Control Program Seminar 3	1
PH.220.600	International Travel Preparation, Safety, & Wellness	1
Epidemiology (	Choose one option)	
Epidemiology - S	eries Option 1	
PH.340.721	Epidemiologic Inference in Public Health I	5
PH.340.722	Epidemiologic Inference in Public Health II	4
Epidemiology -	Series Option 2	
PH.340.721	Epidemiologic Inference in Public Health I	5
PH.340.770	Public Health Surveillance	3
Epidemiology -	Series Option 3	
PH.340.751	Epidemiologic Methods 1	5
PH.340.752	Epidemiologic Methods 2	5

Biostatistics		
PH.140.621	Statistical Methods in Public Health I	4
PH.140.622	Statistical Methods in Public Health II	4
PH.140.623	Statistical Methods in Public Health III	4
PH.140.624	Statistical Methods in Public Health IV	4
International Healt	h	
PH.220.601	Foundations of International Health	4
PH.223.680	Global Disease Control Programs and Policies	4
Infectious Disease	(choose one)	
PH.223.663	Infectious Diseases and Child Survival	3
PH.223.682	Clinical and Epidemiologic Aspects of Tropical Diseases	4
Study Design and	Implementation (choose one)	
PH.223.664	Design and Conduct of Community Trials	4
PH.221.645	Large-scale Effectiveness Evaluations of Health Programs	4
PH.223.705	Good Clinical Practice: A Vaccine Trials Perspective	4
Vaccines Requiren	nent	
PH.223.662	Vaccine Development and Application	4
Environmental Hea		
PH.180.602	Environment and Health in Low and Middle income Countries	2
Management Scien	nces Requirement	
PH.221.602	Applications in Managing Health Organizations in Low and Middle income Countries	3
Social and Behavio	oral Sciences - Qualitative Methods Requirement	
PH.550.604	Qualitative Reasoning in Public Health	2
Social and Behavio	oral Sciences - Design Implementation	
PH.224.689	Health Behavior Change At the Individual, Household and Community Levels	4
Leadership and Int	erprofessional Practice Requirement	
PH.552.625	Building Collaborations Across Sectors to Improve Population Health	0.5
PH.552.623	Principles of Negotiation and Mediation for Public Health Professionals	0.5
PH.552.624	Applications of Negotiation and Mediation for Public Health Professionals	0.5
Capstone and Prac	cticum Requirements (Year 2 only)	
PH.223.810	Global Disease Epidemiology and Control Practicum (Students must complete a minimum of 28 credits of practicum)	28
PH.223.850	Msph Capstone Global Disease Epidemiology and Control (students must complete a minimum of 4 credits of capstone)	4
Recommended Co	ourses based on student feedback and topic areas	
International Healt	h and Diseases	
PH.221.627	Issues in the Reduction of Maternal and Neonatal Mortality in Low income Countries	4
Infectious Disease		
PH.340.612	Epidemiologic Basis for Tuberculosis Control	2
PH.340.646	Epidemiology and Public Health Impact of HIV and AIDS	4
PH.340.627	Epidemiology of Infectious Diseases	4

PH.340.609	Concepts and Methods in Infectious Disease Epidemiology	4
PH.340.677	Infectious Disease Dynamics: Theoretical and Computational Approaches	4
Chronic Disease		
PH.223.667	Chronic Diseases in Low and Middle income Countries: Prevalence and Epidemiology	4
Nutrition		
PH.222.641	Principles of Human Nutrition in Public Health	4
PH.222.647	Nutrition Epidemiology	3
PH.222.649	International Nutrition	3
Population/Progra		
PH.221.641	Measurement Methods in Humanitarian Emergencies	2
PH.380.600	Principles of Population Change	4
PH.380.603	Demographic Methods for Public Health	4
PH.223.866	Special Topics in Program Evaluation in International Health	1
PH.380.611	Fundamentals of Program Evaluation	4
PH.223.632	Methods for Planning and Implementing Evaluations of Large-Scale Health Programs in Low and Middle income Countries	4
Research Ethics		
PH.306.665	Research Ethics and integrity	3
PH.306.655	Ethical Issues in Public Health	3
Vaccines		
PH.223.867	Special Topics in Vaccine Science	1
PH.223.689	Biologic Basis of Vaccine Development	3
Data Management,	/Survey Design	
PH.340.696	Spatial Analysis I: ArcGIS	3
PH.140.630	Introduction to Data Management	3
PH.340.697	Spatial Analysis II: Spatial Data Technologies	2
PH.340.717	Health Survey Research Methods	4
PH.223.600	Application of Spatial Analysis Tools to Inform Decision-Making in Lmics	4
PH.380.711	Issues in Survey Research Design	3
PH.140.632	Introduction to the SAS Statistical Package	3
Epidemiology Meth	nods	
PH.340.653	Epidemiologic Inference in Outbreak Investigations	3
PH.340.753	Epidemiologic Methods 3	5
PH.340.682	Pharmacoepidemiology Methods	3
Qualitative Method	ls .	
PH.224.690	Qualitative Research Theory and Methods	3
PH.224.691	Qualitative Data Analysis	3
Environmental Hea	lth	
PH.180.611	The Global Environment, Climate Change, and Public Health	4
PH.182.626	Issues for Water and Sanitation in Tropical Environmental Health	2
PH.182.640	Food- and Water- Borne Diseases	3
Management Scier	nces	
PH.221.722	Quality Assurance Management Methods for Developing Countries	4

PH.312.603	Fundamentals of Budgeting and Financial Management	3
PH.317.600	Introduction to the Risk Sciences and Public Policy	4
PH.305.607	Public Health Practice	4
PH.221.610	Pharmaceuticals Management for Under-Served Populations	3
Social and Behavio	oral Sciences	
PH.221.688	Social and Behavioral Foundations of Primary Health Care	4
PH.410.620	Program Planning for Health Behavior Change	3
PH.410.650	Introduction to Persuasive Communications: Theories and Practice	4
PH.410.651	Health Literacy: Challenges and Strategies for Effective Communication	3
PH.410.630	Implementation and Sustainability of Community- Based Health Programs	3
Crisis & Response		
PH.300.650	Crisis and Response in Public Health Policy and Practice	3
Injury		
PH.221.631	Evaluation Methods for Injury Interventions	3
PH.552.603	The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health	0.5

Plan of Study Example			
Course	Title	Credits	
First Year			
First Term			
PH.550.860	Academic & Research Ethics at BSPH		
PH.223.840	Special Studies and Research Disease Control (with adviser )	1	
PH.223.801	Global Disease Epidemiology and Control	1	

PH.550.860	Academic & Research Ethics at BSPH	
PH.223.840	Special Studies and Research Disease Control (with adviser)	1
PH.223.801	Global Disease Epidemiology and Control Program Seminar 1	1
PH.340.721	Epidemiologic Inference in Public Health I	5
OR		
PH.340.751	Epidemiologic Methods 1	
PH.140.621	Statistical Methods in Public Health I	4
PH.220.601	Foundations of International Health	4
PH.221.602	Applications in Managing Health Organizations in Low and Middle income Countries	3
	Credits	18
	Cieuits	10
Second Term	Cieuits	10
Second Term PH.223.802	Global Disease Epidemiology and Control Program Seminar 2	1
	Global Disease Epidemiology and Control Program Seminar 2 Epidemiologic Inference in Public Health II	
PH.223.802 PH.340.722	Global Disease Epidemiology and Control Program Seminar 2 Epidemiologic Inference in Public Health II (or PH.340.752)	1
PH.223.802 PH.340.722 or PH.340.770	Global Disease Epidemiology and Control Program Seminar 2 Epidemiologic Inference in Public Health II (or PH.340.752)	1
PH.223.802 PH.340.722 or PH.340.770 or	Global Disease Epidemiology and Control Program Seminar 2 Epidemiologic Inference in Public Health II (or PH.340.752) or Public Health Surveillance	1
PH.223.802 PH.340.722 or PH.340.770 or PH.340.770	Global Disease Epidemiology and Control Program Seminar 2 Epidemiologic Inference in Public Health II (or PH.340.752) or Public Health Surveillance	1
PH.223.802 PH.340.722 or PH.340.770 or PH.340.770 or	Global Disease Epidemiology and Control Program Seminar 2 Epidemiologic Inference in Public Health II (or PH.340.752) or Public Health Surveillance	1 4
PH.223.802  PH.340.722     or PH.340.770  or     PH.340.770  or     PH.340.752	Global Disease Epidemiology and Control Program Seminar 2 Epidemiologic Inference in Public Health II (or PH.340.752) or Public Health Surveillance Public Health Surveillance	1 4 3 5

PH.224.689	Health Behavior Change At the Individual, Household and Community Levels	4
	Credits	25
Third Term		
PH.223.803	Global Disease Epidemiology and Control Program Seminar 3	1
PH.140.623	Statistical Methods in Public Health III	4
PH.223.687	Vaccine Policy Issues	3
PH.180.602	Environment and Health in Low and Middle income Countries	2
PH.552.623	Principles of Negotiation and Mediation for Public Health Professionals	0.5
PH.552.624	Applications of Negotiation and Mediation for Public Health Professionals	0.5
PH.552.625	Building Collaborations Across Sectors to Improve Population Health	0.5
	Credits	11.5
Fourth Term		
PH.140.624	Statistical Methods in Public Health IV	4
PH.223.680	Global Disease Control Programs and Policies	4
	Credits	8
	Total Credits	62.5

#### Add in selections from the following to the Plan of Study Example:

- · General: International Travel Preparation, Safety and Wellness
- · Infectious Disease
- Applied Epidemiology/Randomized Trials
- · Social and Behavioral Sciences
- · Leadership and Interprofessional Practice

### **Health Systems**

#### **Health Systems Course Requirements**

All required courses must be taken for a letter grade with the exception of courses only offered for pass/fail.

The below courses are examples of required courses, for the most up-to-date information and an accurate required course list please view our departmental academic guide (https://www.jhsph.edu/departments/international-health/current-students/academic-guides.html) published August of each academic year.

Code	Title	Credits
Year 1		
General Degree Re	quirements	
PH.550.860	Academic & Research Ethics at BSPH	
PH.221.840	Special Studies and Research Health Systems (Individual Goals Analysis)	1
PH.550.604	Qualitative Reasoning in Public Health	2
PH.220.601	Foundations of International Health	4
PH.220.600	International Travel Preparation, Safety, & Wellr	ness 1
Biostatistics Requ	uirement	
PH.140.621	Statistical Methods in Public Health I	4
PH.140.622	Statistical Methods in Public Health II	4
PH.140.623	Statistical Methods in Public Health III	4
Epidemiology Red	quirement	

PH.340.721	Epidemiologic Inference in Public Health I	5
Health Systems Pr	ogram Requirements	
PH.221.801	Health Systems Program Seminar I	1
PH.221.802	Health Systems Graduate Seminar 2	1
PH.221.803	Health Systems Graduate Seminar 3	1
PH.221.804	Health Systems Graduate Seminar 4	1
PH.221.602	Applications in Managing Health Organizations in Low and Middle income Countries	3
PH.221.646	Health Systems in Low and Middle income Countries	3
PH.221.650	Health Policy Analysis in Low and Middle income Countries	3
PH.221.661	Project Development for Primary Health Care in Developing Countries	4
PH.221.620	Applying Summary Measures of Population Health to Improve Health Systems	3
Health Systems Re	esearch and Evaluation (choose one)	
PH.221.638	Health Systems Research and Evaluation in Developing Countries	4
PH.221.645	Large-scale Effectiveness Evaluations of Health Programs	4
Capstone and Prac	cticum Requirement (Year 2 only)	
PH.221.810	Health Systems Practicum (Students must complete a minimum of 28 credits of practicum)	28
PH.221.850	Msph Capstone Health Systems (students must complete a minimum of 4 credits of capstone)	2 - 16

Health Systems Program Electives Twelve (12) additional credits should be selected from the following list of elective courses. Courses below are organized under specific headings relevant to our program to facilitate selection, thus some courses may appear under more than one heading. These courses must be taken for a letter grade with the exception of courses only offered pass/fail. <sup>1</sup>

Code	Title	Credits
<b>General Electives</b>		
Health Systems Pl	lanning and Management	
PH.221.722	Quality Assurance Management Methods for Developing Countries	4
PH.312.617	Fundamentals of Financial Accounting	3
PH.410.620	Program Planning for Health Behavior Change	3
PH.312.603	Fundamentals of Budgeting and Financial Management	3
PH.312.604	Quantitative Tools for Managers	3
PH.221.654	Systems Thinking in Public Health: Application Key Methods and Approaches	s of 3
PH.312.610	Foundations of Organizational Leadership	3
PH.221.605	History of International Health and Developmen	nt 2
PH.221.608	Managing Non-Governmental Organizations in Health Sector	the 3
PH.221.610	Pharmaceuticals Management for Under-Serve Populations	ed 3
PH.312.621	Strategic Planning	3
PH.312.633	Health Management Information Systems	3
PH.224.692	Methods in Formative Research and Human Centered Design for Intervention Development	4

Introduction to Humanitarian Emergencies

3

**International Health Topics** 

PH.221.613

PH.221.013	introduction to Humanitarian Emergencies	3
PH.180.620	Introduction to Food Systems and Public Health	4
PH.221.612	Confronting the Burden of Injuries: A Global Perspective	3
PH.221.627	Issues in the Reduction of Maternal and Neonatal Mortality in Low income Countries	4
PH.221.635	Global Advances in Community-Oriented Primary Health Care	3
PH.221.637	Health Information Systems	3
PH.221.639	Health Care in Humanitarian Emergencies	3
PH.224.689	Health Behavior Change At the Individual, Household and Community Levels	4
PH.182.626	Issues for Water and Sanitation in Tropical Environmental Health	2
PH.221.634	Stress Management for Relief Workers	2
PH.221.643	Armed Conflict and Health	2
PH.221.688	Social and Behavioral Foundations of Primary Health Care	4
PH.380.750	Migration and Health: Concepts, Rates, and Relationships	3
PH.221.642	Mental Health Aspects of Disaster. Public Health Preparedness and Response	2
PH.221.616	Ethics and Global Public Health Practice	2
PH.221.624	Urban Health in Developing Countries	3
PH.221.611	Food Security and Nutrition in Humanitarian Emergencies	2
PH.221.653	Hospital-Based Injury/Trauma Surveillance in Low- and Middle-income Countries	3
Health Policy		
PH.300.600	Introduction to Health Policy	4
PH.221.614	International Political Science for Ph Practitioners	2
PH.300.712	Formulating Policy: Strategies and Systems of Policymaking in the 21st Century	3
PH.223.687	Vaccine Policy Issues	3
PH.300.652	Politics of Health Policy	4
PH.301.645	Health Advocacy	3
PH.308.610	The Political Economy of Social inequalities and Its Consequences for Health and Quality of Life	3
Part 2: Researc	h and Evaluation Methods Electives	
Research Metho	ds	
PH.330.657	Statistics for Psychosocial Research: Measurement	4
PH.221.641	Measurement Methods in Humanitarian Emergencies	2
PH.221.701	Applications to Gender Analysis Within Health Research and Interventions	2
PH.309.716	Advanced Methods in Health Services Research: Analysis	3
PH.340.717	Health Survey Research Methods	4
PH.410.710	Concepts in Qualitative Research for Social and Behavioral Sciences	3
PH.550.601	Implementation Research and Practice	3
PH.223.664	Design and Conduct of Community Trials	4
PH.224.690	Qualitative Research Theory and Methods	3

PH.300.713	Research and Evaluation Methods for Health Policy	3
PH.340.606	Methods for Conducting Systematic Reviews and Meta-Analyses	4
PH.224.694	Mental Health Intervention Programming in Low and Middle-Income Countries	3
PH.380.711	Issues in Survey Research Design	3
PH.224.691	Qualitative Data Analysis	3
PH.224.692	Methods in Formative Research and Human Centered Design for Intervention Development	4
PH.380.712	Methods in Analysis of Large Population Surveys	3
Monitoring and Eva	aluation	
PH.221.641	Measurement Methods in Humanitarian Emergencies	2
PH.221.645	Large-scale Effectiveness Evaluations of Health Programs	4
PH.221.631	Evaluation Methods for Injury Interventions	3
PH.223.632	Methods for Planning and Implementing Evaluations of Large-Scale Health Programs in Low and Middle income Countries	4
PH.380.611	Fundamentals of Program Evaluation	4
PH.300.713	Research and Evaluation Methods for Health Policy	3
PH.380.612	Applications in Program Monitoring and Evaluation	4
Health Economics		
PH.318.603	Applied Microeconomics for Policymaking	3
PH.313.601	Economic Evaluation I	3
PH.313.602	Economic Evaluation II	3
PH.313.603	Economic Evaluation III	3
PH.313.604	Economic Evaluation IV	3
PH.313.643	Health Economics	3
PH.313.644	Intermediate Health Economics	3
PH.221.652	Financing Health Systems for Universal Health Coverage	3
PH.221.662	Health, Equity, and Economic Development	3
PH.221.663	Globalization and Health: Framework for Analysis	3
PH.309.670	Comparative Health insurance	3
PH.221.617	Behavioral Economics in Health Decisions	2
PH.221.651	Econometrics I	4

As part of the accreditation exercise, some of the curricular requirements have shifted. These can be found in the student handbook. The summary of the change is available in the catalogue amendments (https://ecatalogue.jhu.edu/amendments/).

#### **Plan of Study Example**

Course	Title	Credits
First Year		
First Term		
PH.140.621	Statistical Methods in Public Health I	4
PH.340.721	Epidemiologic Inference in Public Health I	5
PH.550.604	Qualitative Reasoning in Public Health	2
PH.220.601	Foundations of International Health	4

PH.221.602	Applications in Managing Health Organizations in Low and Middle income Countries			
PH.221.801	Health Systems Program Seminar I	1		
PH.221.840	Special Studies and Research Health Systems	1		
PH.550.860	Academic & Research Ethics at BSPH			
	Credits	20		
Second Term				
PH.140.622	Statistical Methods in Public Health II	4		
PH.221.646	Health Systems in Low and Middle income Countries	3		
PH.221.802	Health Systems Graduate Seminar 2	1		
PH.220.600	International Travel Preparation, Safety, & Wellness	1		
PH.221.627	Issues in the Reduction of Maternal and Neonatal Mortality in Low income Countries	4		
PH.221.645	Large-scale Effectiveness Evaluations of Health Programs	4		
	Credits	17		
Third Term				
PH.140.623	Statistical Methods in Public Health III	4		
PH.221.638	Health Systems Research and Evaluation in Developing Countries	4		
PH.221.650	Health Policy Analysis in Low and Middle income Countries	3		
PH.221.803	Health Systems Graduate Seminar 3	1		
PH.223.632	Methods for Planning and Implementing Evaluations of Large-Scale Health Programs in Low and Middle income Countries	4		
	Credits	16		
Fourth Term				
PH.221.620	Applying Summary Measures of Population Health to Improve Health Systems	3		
PH.221.661	Project Development for Primary Health Care in Developing Countries	4		
PH.221.804	Health Systems Graduate Seminar 4	1		
PH.380.612	Applications in Program Monitoring and Evaluation	4		
PH.221.624	Urban Health in Developing Countries	3		
	Credits	15		
	Total Credits	68		

#### **Human Nutrition**

#### **Human Nutrition Course Requirements**

All required courses must be taken for a letter grade with the exception of courses only offered for pass/fail.

The below courses are examples of required courses, for the most up-to-date information and an accurate required course list please view our departmental academic guide (https://www.jhsph.edu/departments/international-health/current-students/academic-guides.html) published August of each academic year.

IMPORTANT NOTE: Courses taken to meet one group of requirements may NOT be used to meet another group of requirements

Code Required Cours		dits
General Degree		
PH.550.860	Academic & Research Ethics at BSPH	
PH.222.840	Special Studies and Research Human Nutrition	1
PH.222.860	Graduate Nutrition Seminar	1
PH.220.600	International Travel Preparation, Safety, & Wellness	-
	equirement (choose one of the following series for a total	
of 16 credits)	quinoment (emecae eme en une reme ming eemee rem u tetui	
PH.140.621	Statistical Methods in Public Health I	4
PH.140.622	Statistical Methods in Public Health II	4
PH.140.623	Statistical Methods in Public Health III	4
PH.140.624	Statistical Methods in Public Health IV	4
OR		
PH.140.651	Methods in Biostatistics I	4
PH.140.652	Methods in Biostatistics II	4
PH.140.653	Methods in Biostatistics III	4
PH.140.654	Methods in Biostatistics IV	4
Epidemiology Re	eauirement	
PH.340.721	Epidemiologic Inference in Public Health I	5
Nutrition and He	-	
PH.222.641	Principles of Human Nutrition in Public Health	4
PH.222.657	Food and Nutrition Policy	2
PH.222.658	Critical Thinking in Nutrition	1
PH.222.642	Assessment of Nutritional Status	3
PH.222.644	Cellular Biochemistry of Nutrients	3
PH.222.655	Nutrition and Life Stages	3
PH.222.654	Food, Culture, and Nutrition	4
	Health (choose one option)	
	take both courses	
PH.187.610	Public Health Toxicology (must be taken in	4
	conjuncture with another Environmental Health course listed)	
PH.552.612	Essentials of One Health	0.5
Option 2: Choos	se one of the courses below	
PH.180.611	The Global Environment, Climate Change, and Public Health	4
PH.180.602	Environment and Health in Low and Middle income Countries	2
PH.180.601	Environmental Health	5
PH.182.640	Food- and Water- Borne Diseases	3
	ose one of the following)	_
PH.552.622	Creating, Implementing and Monitoring Budgets for Projects and Programs	1
PH.552.621	Basic Resources Management for Public Health	1
	ciences (choose one of the following) The courses not chosen fy the elective requirement	
PH.221.602	Applications in Managing Health Organizations in Low and Middle income Countries	3
PH.312.601	Fundamentals of Management for Health Care Organizations	3

PH.222.860

PH.410.622	Strategic Leadership Principles and Tools for Health System Transformation in Developing Countries	4
PH.312.600	Managing Health Services Organizations (This course also fulfills the budget requirement )	4
PH.312.655	Organizational Behavior and Management	2
Leadership and Int	terprofessional Practice	
PH.552.625	Building Collaborations Across Sectors to Improve Population Health	e 0.5
PH.552.623	Principles of Negotiation and Mediation for Public Health Professionals	0.5
PH.552.624	Applications of Negotiation and Mediation for Public Health Professionals	0.5
Capstone and Prac	cticum Requirement (Year 2 only)	
PH.222.810	Human Nutrition Practicum (Students must complete a minimum of 28 credits of practicum )	28
PH.222.850	Msph Capstone Human Nutrition (students must complete a minimum of 4 credits of capstone)	4
Recommended El	ectives: 18-23 Credits	
Food Systems and	l Production	
PH.180.620	Introduction to Food Systems and Public Health	4
PH.180.655	Baltimore Food Systems: A Case Study of Urban Food Environments	4
PH.180.606	Case Studies in Food Production and Public Healt	h 4
Nutrition		
PH.222.647	Nutrition Epidemiology	3
PH.221.611	Food Security and Nutrition in Humanitarian Emergencies	2
PH.222.649	International Nutrition	3
PH.340.644	Epidemiology of Diabetes and Obesity	2
PH.700.603	Introduction to Ethical Theory	3
PH.222.840	Special Studies and Research Human Nutrition (Developing Skills in Clinical Nutrition )	1
Research Methods	3	
PH.224.689	Health Behavior Change At the Individual, Household and Community Levels	4
PH.340.722	Epidemiologic Inference in Public Health II	4
PH.223.664	Design and Conduct of Community Trials	4
PH.224.690	Qualitative Research Theory and Methods	3
PH.410.690	Ethnographic Fieldwork	3
PH.221.660	Systems Science in Public Health: Basic Modeling and Simulation Methods	3
PH.222.653	Food Technology and Health	3
PH.222.661	Designing Healthy Diets	2
PH.222.652	Nutrition in Disease Treatment and Prevention	3
PH.224.691	Qualitative Data Analysis	3
Plan of Study Exam Course		edits
First Year	inie U	cuito
First Term		
PH.550.860	Academic & Research Ethics at BSPH	
PH.140.621	Statistical Methods in Public Health I	4
PH.340.721	Epidemiologic Inference in Public Health I	5
11.070.721	Epidemiologio inicienoe in i abile ricalti i	J

**Graduate Nutrition Seminar** 

PH.222.641	Principles of Human Nutrition in Public Health	4
PH.222.657	Food and Nutrition Policy	2
PH.222.658	Critical Thinking in Nutrition	1
PH.222.840	Special Studies and Research Human Nutrition (IGA)	1
PH.552.625	Building Collaborations Across Sectors to Improve Population Health	0.5
	Credits	18.5
Second Term		
PH.140.622	Statistical Methods in Public Health II	4
PH.220.600	International Travel Preparation, Safety, & Wellness	1
PH.222.860	Graduate Nutrition Seminar	1
PH.222.644	Cellular Biochemistry of Nutrients	3
PH.222.642	Assessment of Nutritional Status	3
PH.552.623	Principles of Negotiation and Mediation for Public Health Professionals	0.5
PH.552.624	Applications of Negotiation and Mediation for Public Health Professionals	0.5
xxx.xxx Managen	nent Sciences option	
	Credits	13
Third Term		
PH.140.623	Statistical Methods in Public Health III	4
PH.222.655	Nutrition and Life Stages	3
PH.222.860	Graduate Nutrition Seminar	1
xxx.xxx Environm	ental Health option	
	Credits	8
Fourth Term		
PH.140.624	Statistical Methods in Public Health IV	4
PH.222.654	Food, Culture, and Nutrition	4
PH.222.860	Graduate Nutrition Seminar	1
	Credits	9
	Total Credits	48.5

#### **Social and Behavioral Interventions**

#### **Program Requirements**

A minimum total of 96 credits of coursework is required. Of these, 64 credits are associated with academic coursework, generally completed within the first year of the program. During the second year, 28 credits are associated with a practicum experience and a minimum of 4 credits with a final capstone. Courses taken to fulfill program requirements must be taken for a letter grade unless a course is only offered as Pass/Fail.

The below courses are examples of required courses, for the most up-to-date information and an accurate required course list please view our departmental academic guide (https://www.jhsph.edu/departments/international-health/current-students/academic-guides.html) published August of each academic year. <sup>1</sup>

As part of the accreditation exercise, some of the curricular requirements have shifted. These can be found in the student handbook. The summary of the change is available in the catalogue amendments (https://ecatalogue.jhu.edu/amendments/).

# IMPORTANT NOTE: A course taken to meet a requirement may NOT be used to meet another requirement

Code	Title Cre	edits		
Required Courses	S			
General Degree Requirements				
PH.550.860	Academic & Research Ethics at BSPH			
PH.224.840	Special Studies and Research Social and Behavioral Interventions (IGA)	1		
PH.220.601	Foundations of International Health (Students must take the on-campus version)	4		
PH.220.600	International Travel Preparation, Safety, & Wellness	: 1		
Biostatistics Requ	irement			
PH.140.621	Statistical Methods in Public Health I	4		
PH.140.622	Statistical Methods in Public Health II	4		
PH.140.623	Statistical Methods in Public Health III	4		
Epidemiology Req	uirement			
PH.340.721	Epidemiologic Inference in Public Health I	5		
Leadership, Manag	gement, and Interprofessional Practice			
PH.221.602	Applications in Managing Health Organizations in Low and Middle income Countries	3		
PH.552.623	Principles of Negotiation and Mediation for Public Health Professionals	0.5		
PH.552.624	Applications of Negotiation and Mediation for Public Health Professionals	0.5		
Social and Behavio	oral Interventions Program Series			
PH.224.860	Social and Behavioral Interventions Program Seminar I:Applied Social Science & Global Health	1		
PH.224.861	Social and Behavioral Interventions Program Seminar II: Participatory Approaches and the Role of Community	1		
PH.224.862	Social and Behavioral Interventions Program Seminar III: Intervention Case Studies	1		
PH.224.689	Health Behavior Change At the Individual, Household and Community Levels	4		
PH.224.692	Methods in Formative Research and Human Centered Design for Intervention Development	4		
Qualitative Method	-			
PH.224.690	Qualitative Research Theory and Methods	3		
PH.224.691	Qualitative Data Analysis	3		
PH.224.697	Qualitative Research Practicum I: Partnerships and Protocol Development	1 2		
PH.224.698	Qualitative Research Practicum II: Collecting Qualitative Data	2		
PH.224.699	Qualitative Research Practicum III: Analyzing and Writing Qualitative Findings	2		
Public Health Poli	cy (choose one of the following)			
PH.222.657	Food and Nutrition Policy	2		
PH.410.668	Policy Interventions for Health Behavior Change	3		
PH.223.687	Vaccine Policy Issues	3		
PH.380.771	Understanding and Changing International Reproductive Health Policy	3		
PH.380.667	Women's Health Policy	3		
Social & Behaviora	al Sciences Electives: Choose two to three courses (6 from the following options			

PH.180.620	Introduction to Food Systems and Public Health	4
PH.222.657	Food and Nutrition Policy	2
PH.410.612	Sociological Perspectives on Health	3
PH.410.690	Ethnographic Fieldwork	3
PH.410.656	Entertainment Education for Behavior Change and Development	4
PH.410.733	Communication Network Analysis in Public Health Programs	4
PH.221.701	Applications to Gender Analysis Within Health Research and Interventions	2
PH.301.627	Understanding and Preventing Violence	3
PH.330.620	Qualitative and Quantitative Methods for Mental Health and Psychosocial Research in Low Resource Settings	3
PH.340.717	Health Survey Research Methods	4
PH.380.642	Child Health and Development	3
PH.380.720	Masculinity, Sexual Behavior & Health: Adolescence & Beyond	3
PH.410.615	Research Design in the Social and Behavioral Sciences	3
PH.410.631	Introduction to Community-Based Participatory Research: Principles and Methods	3
PH.410.650	Introduction to Persuasive Communications: Theories and Practice	4
PH.410.668	Policy Interventions for Health Behavior Change	3
PH.340.629	The Epidemiology of LGBTQ Health	3
PH.700.622	Bioethics, Human Rights, and Global Health	3
PH.180.655	Baltimore Food Systems: A Case Study of Urban Food Environments	4
PH.221.605	History of International Health and Development	2
PH.221.635	Global Advances in Community-Oriented Primary Health Care	3
PH.221.642	Mental Health Aspects of Disaster. Public Health Preparedness and Response	2
PH.221.650	Health Policy Analysis in Low and Middle income Countries	3
PH.221.688	Social and Behavioral Foundations of Primary Health Care	4
PH.224.694	Mental Health Intervention Programming in Low and Middle-Income Countries	3
PH.330.661	Social, Psychological, and Developmental Processes in the Etiology of Mental Disorders	3
PH.340.683	Human Rights in Public Health Practice	2
PH.380.623	Adolescent Health and Development	3
PH.380.663	Gender-Based Violence Research, Practice and Policy: Issues and Current Controversies	3
PH.380.665	Family Planning Policies and Programs	4
PH.410.613	Psychosocial Factors in Health and Illness	3
PH.410.654	Health Communication Programs I: Planning and Strategic Design	4
PH.410.651	Health Literacy: Challenges and Strategies for Effective Communication	3
PH.221.621	Gender and Health: Foundational Theories and Applications	3
PH.410.752	Children, Media, and Health	3

PH.180.636	Human Rights and Health Seminar	3	PH.260.631	Immunology, Infection and Disease	3
PH.221.616	Ethics and Global Public Health Practice	2	PH.223.682	Clinical and Epidemiologic Aspects of Tropical	4
PH.222.654	Food, Culture, and Nutrition	4	111.220.002	Diseases	
PH.224.605	Indigenous Health	2	PH.183.631	Fundamentals of Human Physiology	4
PH.300.652	Politics of Health Policy	4	PH.223.663	Infectious Diseases and Child Survival	3
PH.301.645	Health Advocacy	3	PH.182.640	Food- and Water- Borne Diseases	3
PH.308.610	The Political Economy of Social inequalities and	3	PH.260.656	Malariology	4
	Its Consequences for Health and Quality of Life		PH.380.661	Clinical Aspects of Maternal and Newborn Health	3
PH.380.668	International Perspectives on Women, Gender, and	3	PH.380.760	Clinical Aspects of Reproductive Health	3
	Health		PH.223.689	Biologic Basis of Vaccine Development	3
PH.380.747	International Adolescent Health	3	PH.330.623	Brain and Behavior in Mental Disorders	3
PH.380.771	Understanding and Changing International Reproductive Health Policy	3	PH.380.762	HIV Infection in Women, Children, and Adolescents	4
PH.410.630	Implementation and Sustainability of Community-	3		ealth (choose one of the following)	
111.410.000	Based Health Programs	3	PH.180.609	Principles of Environmental Health	4
PH.410.655	Health Communication Programs II: Implementation and Evaluation	4	PH.180.611	The Global Environment, Climate Change, and Public Health	4
PH.410.663	Media Advocacy and Public Health: Theory and	3	PH.182.640	Food- and Water- Borne Diseases	3
111.410.003	Practice	3	PH.180.606	Case Studies in Food Production and Public Health	4
PH.410.721	Translating Research into Public Health Programs and Policy	3	PH.185.600	One Health Tools to Promote and Evaluate Healthy and Sustainable Communities (This course also fulfills the Management and Leadership	3
Evaluation-Relat	ted Research (choose one of the following)			requirement)	
PH.380.611	Fundamentals of Program Evaluation	4	Budgeting (choos	se one of the following)	
PH.221.627	Issues in the Reduction of Maternal and Neonatal Mortality in Low income Countries	4	PH.552.622	Creating, Implementing and Monitoring Budgets for Projects and Programs	1
PH.221.645	Large-scale Effectiveness Evaluations of Health Programs	4	PH.552.621	Basic Resources Management for Public Health	1
PH.340.717	Health Survey Research Methods	4	Year 2 Required (		1.4
PH.340.722	Epidemiologic Inference in Public Health II	4	PH.224.810	Social and Behavioral Interventions Practicum (Students must complete a minimum of 28 credits	14
PH.221.631	Evaluation Methods for Injury Interventions	3		of practicum)	
PH.221.638	Health Systems Research and Evaluation in Developing Countries	4	PH.224.850	Msph Capstone Social and Behavioral Interventions (students must complete a minimum	4
PH.222.647	Nutrition Epidemiology	3		of 4 credits of capstone)	
PH.223.664	Design and Conduct of Community Trials	4	<b>Elective Courses</b>	•	
PH.300.713	Research and Evaluation Methods for Health	3	Recommended ba	ased on feedback from students (none required)	
PH.380.711	Policy	2	PH.221.612	Confronting the Burden of Injuries: A Global Perspective	3
PH.140.624	Issues in Survey Research Design Statistical Methods in Public Health IV	3	PH.221.627	Issues in the Reduction of Maternal and Neonatal	4
PH.313.790	Introduction to Economic Evaluation	3	FH.221.021	Mortality in Low income Countries	4
	ology: Choose one from Group 1 and one from Group 2	U	PH.221.639	Health Care in Humanitarian Emergencies	3
Group 1	orogy. Oncode one from Group 1 and one from Group 2		PH.221.646	Health Systems in Low and Middle income	3
PH.260.600	Introduction to the Biomedical Sciences	4		Countries	
PH.552.608	Biologic, Genetic and Infectious Bases of Human	0.5	PH.221.605	History of International Health and Development	2
	Disease	0.0	PH.410.622	Strategic Leadership Principles and Tools for	4
Group 2				Health System Transformation in Developing Countries	
PH.222.641	Principles of Human Nutrition in Public Health	4	PH.221.608	Managing Non-Governmental Organizations in the	3
PH.120.620	Fundamentals of Reproductive Biology	3	. 11.221.000	Health Sector	J
PH.260.636	Evolution of Infectious Disease	3	PH.221.635	Global Advances in Community-Oriented Primary	3
PH.340.646	Epidemiology and Public Health Impact of HIV and AIDS	4	PH.221.650	Health Care Health Policy Analysis in Low and Middle income	3
PH.187.610	Public Health Toxicology	4		Countries	J
PH.550.630	Public Health Biology	3	PH.223.687	Vaccine Policy Issues	3
PH.223.662	Vaccine Development and Application (prerequisite for Vaccine Policy Issues)	e 4	PH.380.750	Migration and Health: Concepts, Rates, and Relationships	3

PH.221.616	Ethics and Global Public Health Practice	2
PH.221.624	Urban Health in Developing Countries	3
PH.221.661	Project Development for Primary Health Care in Developing Countries	4
PH.222.649	International Nutrition	3
PH.223.680	Global Disease Control Programs and Policies	4
PH.340.639	Assessing Epidemiologic Impact of Human Righ Violations	nts 2
PH.380.668	International Perspectives on Women, Gender, a Health	nd 3
PH.380.747	International Adolescent Health	3
Plan of Study Exa	mple	
Course		Credits
First Year		
First Term		
PH.550.860	Academic & Research Ethics at BSPH	
PH.224.840	Special Studies and Research Social and Behavioral Interventions (IGA )	1
PH.224.860	Social and Behavioral Interventions	1
	Program Seminar I:Applied Social Science & Global Health	
PH.220.601	Foundations of International Health	4
PH.340.721	Epidemiologic Inference in Public Health I	5
PH.140.621	Statistical Methods in Public Health I	4
PH.221.602	Applications in Managing Health Organizations in Low and Middle income Countries	3
	Credits	18
Second Term		
PH.224.861	Social and Behavioral Interventions Program Seminar II: Participatory Approaches and the Role of Community	1
PH.224.689	Health Behavior Change At the Individual, Household and Community Levels	4
PH.224.697	Qualitative Research Practicum I: Partnerships and Protocol Development	2
PH.140.622	Statistical Methods in Public Health II	4
PH.410.668	Policy Interventions for Health Behavior Change	3
PH.340.717	Health Survey Research Methods	4
PH.552.623	Principles of Negotiation and Mediation for Public Health Professionals	0.5
PH.552.624	Applications of Negotiation and Mediation for Public Health Professionals	0.5
	Credits	19
Third Term		
PH.224.862	Social and Behavioral Interventions Program Seminar III: Intervention Case Studies	1
PH.224.690	Qualitative Research Theory and Methods	3
PH.224.698	Qualitative Research Practicum II: Collecting Qualitative Data	2
PH.140.623	Statistical Methods in Public Health III	4
PH.182.640	Food- and Water- Borne Diseases	3

PH.380.611	Fundamentals of Program Evaluation	4
	Credits	17
Fourth Term		
PH.220.600	International Travel Preparation, Safety, & Wellness	1
PH.224.691	Qualitative Data Analysis	3
PH.224.699	Qualitative Research Practicum III: Analyzing and Writing Qualitative Findings	2
PH.224.692	Methods in Formative Research and Human Centered Design for Intervention Development	4
PH.222.654	Food, Culture, and Nutrition	4
PH.223.682	Clinical and Epidemiologic Aspects of Tropical Diseases	4
	Credits	18
	Total Credits	72

# MSPH Departmental Requirements Residency Requirement

The total number of course credits to be earned depends upon individual program requirements. But, to meet the Residency requirement, students must complete a minimum of 64 credits of didactic courses in four consecutive terms. When general and program-specific requirements total less than 64, the difference may be made up in electives. Only those special studies earning credit that are part of a program's requirements (840 series) are admissible. The Residency requirement is usually fulfilled in a master's student's first year.

#### **General Requirements**

Individual Goals Analysis (IGA): During the first term of enrollment, students will register for one credit of Special Studies (Individual Goals Analysis) with their adviser in order to define specific educational objectives and to work out a program of study consonant with those objectives.

**Ethics Requirement:** All master's students are required to take course 550.860.82 Academic and Research Ethics at BSPH in their first term of matriculation. Failure to complete this course will prevent students from matriculating for the next term and continuing their program.

Students who are being funded by an NIH training grant must also take one of the following two courses: 550.600 Responsible Conduct of Research offered first term OR 306.665 Research Ethics and Integrity: US and International Issues, offered third term.

All students must complete the Online Human Subjects Training Module prior to the end of the 4th term. However, for students wishing to work on research projects part-time for faculty during the academic year, it would be advisable to take this module in the 1st term as the training is required for such research work. For information on the Training module go to https://publichealth.jhu.edu/offices-and-services/institutional-review-board-irb/training (https://publichealth.jhu.edu/offices-and-services/institutional-review-board-irb/training/).

International Travel Preparation, Safety, and Wellness: All IH students are required to take this course (220.600.81) during their first year and before traveling overseas for any academic reason, regardless of whether their research is conducted within or outside of the United States. This course is offered three times a year, and students must only take it once.

#### Registration

MSPH students must register for a minimum of 16 credits of courses each term until they graduate to be full-time students in the IH department. Students do not register for summer or winter intersession. Summer and winter intersession courses may be available to students with the understanding that students pay 100% of the tuition.

Courses taken for audit do not count towards this 16-credit minimum. Failure to register for a term results in automatic withdrawal. A withdrawn student must be formally readmitted before resuming a program of study. Upon readmission, a student must be registered for a minimum of two consecutive terms prior to completing degree requirements.

Students must be registered in the term they complete their capstone. If a student does not complete all requirements by the last day of the fourth term of their second year and wishes to graduate in August, they are required to register for 2 credits during the summer term. Students are responsible for their full tuition and fees during the summer. If students are unable to complete in August, the student must register full-time in the first term and in each term until they complete.

#### Important Information about Registration

- Registration below 16 credits is not allowed and violates the terms of a student's tuition scholarship.
- Any student registering below 16 credits during any term could be in violation of their scholarship requirements resulting in a loss of their tuition scholarship.
- Courses taken for Audit do not count toward the 16 credits per term requirement but do count toward the 22 credit maximum.

During their 2nd year, students register in their Program Area's MSPH Practicum course and for their Capstone requirements. When a student takes Special Studies, they must register for Special Studies in their specific Program area. The following course numbers correspond to the different program areas:

#### **Practicum**

221.810 Health Systems Practicum

222.810 Human Nutrition Practicum

222.815 Human Nutrition Registered Dietitian Practicum

223.810 GDEC Practicum

224.810 SBI Practicum

#### Capstone

221.850 MSPH Capstone Health Systems

222.850 MSPH Capstone Human Nutrition (including Dietitian)

223.850 MSPH Capstone GDEC

224.850 MSPH Capstone SBI

#### **Special Studies**

221.840 Special Studies in Health Systems

222.840 Special Studies in Human Nutrition

223.840 Special Studies in GDEC

224.840 Special Studies in SBI

These are pass/fail credits and a passing grade is only provided if program requirements are met within the corresponding term.

Students each term can register for 14-16 credits of Practicum or a combination of Practicum, Capstone, and didactic courses. If they audit a course, they must have 16 additional credits for a letter grade or pass/fail. Within a term, a maximum of 22 credits is allowed, combining Practicum, Capstone, and other didactic courses (audited courses are also counted within the 22 credit maximum). A sample schedule for year 2 is below.

#### SAMPLE SCHEDULE

- Complete at least 2 terms of practicum in the second year by completing at least 28 credits of practicum (22X.810). A student can register and earn more than 28 credits, but not less.
- Students should register for 22X.850 during the term in which they will complete their Capstone requirement. A student must register for a minimum of 4 credits.

Courses taken at other schools within Johns Hopkins University must be considered carefully. If a student is interested in taking courses outside of the Bloomberg School of Public Health, students must meet with the Academic Program Administrator (Elisabeth Simmons) prior to registering to discuss if the credits count toward their degree and or toward registration requirements.

#### **Time of Completion Requirements**

Students are expected to complete all requirements for the degree within two years of matriculation. Delays may be considered in special circumstances but in no case may the time in the program exceed four years, regardless of the residence status of the student (other than a leave of absence). Responsibility for tracking and adhering to the graduation timelines belongs to the student. If requirements are not met by the dates posted (see graduation schedule), registration for subsequent terms is required.

#### **Introduction to Online Learning**

The School of Public Health offers courses in various formats, including a number of online courses. In order to be eligible to take an online course, students must complete the Introduction to Online Learning, which is offered through the Center for Teaching and Learning at the Johns Hopkins Bloomberg School of Public Health. This non-credit minicourse is a prerequisite for all courses offered by this division and must be completed prior to the start of the term in which a student wishes to enroll in an online course. Since the School does not permit conditional and/or concurrent enrollment (that is, a student must take the online course prior to enrolling in a distance education course), we require all incoming students to take this non-credit course during the first term they enroll. For course dates and enrollment information, please visit the CoursePlus website (https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/90/).

#### Capstone

The culminating experience of the MSPH program is the production of an MSPH capstone that provides a meaningful contribution to the knowledge of the health of underserved populations. The capstone is not a thesis in that it need not contain original research findings for review by an academic committee. However, it should provide tangible evidence of expertise on a specific applied topic of international health relevance. The capstone must be reviewed and approved by two faculty readers. Detailed, step-by-step, guidelines for the MSPH capstone content,

format, and submission for each program area can be found in the Final Capstone Guide.

#### **Capstone Deadlines**

Students must select one of four graduation timelines. Each task must be completed by the due dates indicated or students will be required to register for the next academic term until all requirements are met. The deadline for a cohort will be similar to the deadlines for the previous cohort. Students should familiarize themselves with the capstone deadlines for the previous cohort, to view these deadlines please see the academic guide (https://www.jhsph.edu/departments/international-health/current-students/academic-guides.html). The timeline for the second year will be distributed at the end of the first year.

MSPH Students must also abide by the complete list of additional tasks and deadlines, which may be set by each program area and will be given to students by their respective Program Coordinators by the date of the Comprehensive Exam, typically the end of May or early June of the student's 1st year.

#### **Practicum**

In addition to completing the requisite coursework, students must gain practical experience in the application of the principles and methods learned. Often the experience is acquired through field placement (practicum) in a work setting that may be the route to permanent employment, though such long-term implications are by no means essential. Alternatively, the student may undertake within the School environment the investigation and analysis of a significant issue related to the health of underserved populations. Students begin their full-time practicum sometime between June and September of their second year. Practicum requirements are a minimum of two terms full-time (4 months) and up to 11 months. Detailed information on the requirements for the practicum, including IRB requirements can be found in the Practicum Guide.

#### **Departmental Written Comprehensive Examination**

Satisfactory performance is required on a written comprehensive examination. The date for the Departmental Comprehensive Exam is TBD. The student should take the exam after completing the required coursework because the questions will cover all required fields of study. Although most of the material for the exam is covered in specific courses, graduate education involves much more than the accumulation of specific course credits. Thus, students are responsible for the material on the exam regardless of the particular curriculum they have taken.

A minimum overall passing grade of 70/100 is required. Those scoring below this level may retake the entire examination in January of the following year. A January examination sitting is offered only for students who fail the May examination. Only one reexamination is permitted. Students failing twice are terminated from the MSPH program.

Students must **NOT** pass along exam questions to future generations of students, **NOT** post questions and/or answers online, **NOT** seek, solicit, accept, or consult content from prior comprehensive exams, and **NOT** share or publicize any content from the comprehensive exam in any form with anyone at any time. Failure to adhere to these rules could result in termination from the program.

## **Master's Degrees Specific Policies**

For a full list of program policies, please visit the MSPH in International Health (https://publichealth.jhu.edu/academics/msph-dept-of-international-health/) webpage where students can find a link to our

most recent Academic Guide (https://publichealth.jhu.edu/departments/international-health/programs/academic-quides-and-competencies/).

# Program Concentration Learning Outcomes

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/publichealth/ceph-requirements/).

Specific concentration competencies are listed below.

#### **GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL**

- Examine and recommend programs and policies to improve global public health, with a focus on low-and-middle income settings and under-resourced populations;
- Design epidemiologic studies to define and measure public health problems in low-resource settings including the design, ethical considerations, and implementation of the studies;
- Assess and recommend interventions to prevent and control major causes of morbidity and mortality (or their risk factors) in low- and middle-income settings and under-resourced populations;
- Examine and differentiate the types, the processes of development, and the guidelines of use for globally-available public health interventions including vaccines, behavioral, environmental and/or technological interventions;
- Identify and critique sources of large-scale public health data used to describe, illustrate and interpret the state of health at a population level; and
- Analyze large-scale data from low-and-middle income settings or from global health agencies to illustrate and interpret a public health priority.

#### **HEALTH SYSTEMS**

- Interpret knowledge of public health problems pertinent to disadvantaged populations and health systems and develop solutions through assessment, planning, management, implementation, and control;
- Apply concepts and principles of management and finance to the operation of health system projects in resource-poor settings;
- Analyze and synthesize data relevant to the management and control
  of health systems problems and their solutions within resource-poor
  settings;
- Apply appropriate research methods (quantitative, qualitative, mixedmethods) to assess health systems outcomes of interest of a policy, program, or intervention; and
- Formulate learnings and findings related to health systems problems, their gaps, potential solutions, and implementation across various contexts.

#### **HUMAN NUTRITION**

- Explain the roles of energy, macronutrients, and micronutrients in biological processes and functions;
- Examine the biological, social, cultural, and behavioral influences on nutrition in the different stages of human development;
- Examine appropriate measures and indicators of dietary intake, physical activity, nutritional status, and metabolic dysfunction

- to characterize the nutritional health or risks of individuals or populations;
- 4. Propose policy options to address specific food and nutrition problems in a given setting or context; and
- Apply cultural information to the development, implementation, and evaluation of nutrition intervention programs.

#### SOCIAL AND BEHAVIORAL INTERVENTIONS

- Identify major global health problems of underserved populations in lower resource contexts, and understand important issues in the international community's response, including the historical tensions of whether to approach them vertically or horizontally, the challenges of programmatic and environmental sustainability, the complex evolution of major global health initiatives, and to examine examples of past and ongoing interventions;
- Describe conceptual tools from the social and behavioral sciences
  to understand multi-level factors influencing health behavior, apply
  appropriate combinations of theoretically based intervention
  modalities to scenarios, and apply these tools and modalities to
  design social and behavioral interventions;
- Examine methodologies for qualitative inquiry, formulate appropriate
  qualitative research questions, collaborate with community partners,
  and collect qualitative data using multiple methods appropriate to
  address a real-world public health challenge;
- 4. Distinguish and apply context-appropriate inductive and deductive qualitative data analysis methodologies to qualitative data sets, manage and interpret qualitative data, and present findings in audience-appropriate formats to collaborating community partners; and
- Develop theory-driven, integrated formative research and usercentered design protocols to inform the development of appropriate, feasible, acceptable, and sustainable social and behavioral interventions in lower-income contexts.