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Mission

The mission of the Global Health Epidemiology Program is to educate graduate students by developing the necessary methodological and quantitative skills to conduct research in an international setting and successfully improve the health and well-being of people around the world. While nurturing students' capacity to think critically and creatively, we strive to deepen their commitment to improving the public's health and to engaging in and promoting public service—qualities we believe are essential for future epidemiologists and public health practitioners.

Goals

The goals of the Global Health Epidemiology Program are to ensure that graduates:

- ◆ Identify determinants of health problems including socio-cultural factors;
- ◆ Understand and adhere to high scientific standards for research;
- ◆ Understand and follow guidelines for ethical treatment of research participants;
- ◆ Communicate research findings to a lay audience;
- ◆ Assume leadership roles in designing and conducting epidemiologic and intervention research at both national and global levels; and
- ◆ Respect cultural diversity throughout all of the above.

Requirements

Students may not be admitted directly into the Global Health Epidemiology program. Students in either the Epidemiology program or the Global Health program may apply to the Global Health Epidemiology program after they have completed PubH 6002, 6003, and 6400 (usually after their first semester). Successful applicants are expected to have earned a minimum of A- in each of these three courses. Students who are interested in this program and intend to complete the MPH in two years will need to register for the above mentioned three courses in their first semester. Students not admitted into the Global Health Epidemiology program will continue in their original program.

All GW School of Public Health and Health Services (SPHHS) MPH students who are admitted into the MPH Global Health Epidemiology Program enroll in Core Courses (16 credits), Epidemiology Program-Specific Required Courses (9 credits), Global Health Program-Specific Required Courses (9 credits) and Concentration electives (7 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. The curriculum sheets that follow describe the requirements for the MPH in Global Health Epidemiology.

Program-Specific Competencies

The Global Health Epidemiology specialization prepares students for epidemiological research and evaluation in a variety of local, national, and international organizations. The curriculum prepares students to design and conduct studies, manage health

data, and make leadership decisions in the context of international public health. The following competencies were developed in concert with professors of epidemiology and global health courses, epidemiology textbooks, conversations with prospective employers, and experience in the field.

Upon completion of the MPH in Global Health Epidemiology, students will demonstrate functional competence to:

- Apply the theories and principles of epidemiology, biostatistics, economics and social development to the identification, classification and elaboration of the determinants and distribution of disease and global health threats and opportunities at the community, national and international levels. **Relevant courses:** PubH 6247, 6249, 6252, 6400 and 6440
- Assess the functions, capacities, management and governance of governmental, international and non-state organizations in the translation of scientific and program evidence to inform public health policy making and strategy development. **Relevant courses:** PubH 6400, 6401, and 6402.
- Critically analyze global health trends and assess patterns of emerging diseases to postulate hypotheses and to differentiate determinants in order to evaluate the impact of health problems and prioritize approaches based on economic affordability and political feasibility. **Relevant courses:** PubH 6247, 6249, 6252, 6400, 6401 and 6440.
- Apply underlying principles and methods including ethical issues involved in the design, planning, and conduct of epidemiologic studies including observational and experimental designs, screening programs, public health surveillance, and other epidemiologic designs in a global health setting. **Relevant courses:** PubH 6247, 6249, 6252, and 6400.
- Identify the appropriate data analysis methods, conduct data management and data analysis using a computerized software program, and interpret the results from epidemiological studies. **Relevant courses:** PubH 6249 and 6252.
- Successfully apply public health theory and experiential evidence in the development and management of project, program and institutional strategies capable of reducing health risks, addressing underlying vulnerabilities, and mitigating the impact disease. **Relevant courses:** PubH 6400 and 6401.
- Effectively synthesize data and relevant literature with economic and social arguments to formulate communication strategies in global health action in various professional, institutional, political and cultural settings as well as facilitate the distribution of scientific findings through manuscripts and scientific presentations. **Relevant courses:** PubH 6247, 6249, 6252, 6400, and 6401.
- Evaluate the benefits, costs and effectiveness of global health project, program and policy approaches and interventions through the appropriate choice and application of qualitative and quantitative survey and analysis methods. **Relevant courses:** PubH 6247, 6400, and 6401.
- Demonstrate their understanding of the fundamental concepts related to the theory of the consumer and production decisions by health care organizations; be able to critically evaluate research findings related to various healthcare markets; and use economic analysis and statistical tools for evaluating problems faced by health care organizations. **Relevant courses:** PubH 6440
- Critically assess issues in at least one of the following specialty areas in global health epidemiology:
 - Clinical epidemiology such as decision analysis, cost-effectiveness to clinical and public health problems.
 - Major topics in infectious disease epidemiology
 - Methods and issues of cancer epidemiology
 - Methods and issues of surveillance systems in public health.
 - Qualitative research methods
 - Program design and implementation
 - Major topics in food, water and vector borne diseases and control
 - Advanced quantitative methods

Relevant courses: Listed concentration electives

Required Core Courses				
Required Core Courses		Credits	Semester Offered	Grade
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 6005	Policy Approaches to Public Health	2	Fall, Spring, Summer 10 wk	
PubH 6007	Social and Behavioral Science Methods	2	Fall, Spring, Summer I	
PubH 6008	Management Approaches to Public Health	2	Fall, Spring, Summer 10-wk	
Total	Core Credits	16		
GH Required Program-Specific Courses – 9 credits				
PubH 6400	Global Health Frameworks	3	Fall	
PubH 6401	Comparative Regional Determinants of Health	2	Spring	
PubH 6402	Global Health Policy and Practice: Washington Seminar	2	Fall, Spring	
PubH 6440	Global Health Economics & Finance	2	Spring	
		9		
Epi/Bio Required Program-Specific Courses – 9 credits				
Required Program Specific Courses		Credits	Semester Offered	Grade
PubH 6247	Design of Health Studies	3	Fall, Spring	
PubH 6249	Use of Statistical Packages: Data Management and Data Analysis	3	Fall, Spring	
PubH 6252	Advanced Epidemiology Methods	3	Fall, Spring	
		9		
Elective Concentration Courses – 7 credits				
Select 7 credits from the following Global Health and Epidemiology/Biostatistics Courses				
Other courses may be used with permission of advisor				
Choose 7 credits from the following		Credits	Semester Offered	Grade
Department of Epidemiology and Biostatistics				
PubH 6242	Clinical Epidemiology	2	Spring	
PubH 6244	Cancer Epidemiology	2	Spring	
PubH 6245	Infectious Disease Epidemiology	2	Spring	
PubH 6250	Epidemiology of HIV/AIDS	2	Fall	
PubH 6253	Issues in HIV Care and Treatment	1	Fall	
PubH 6255	Organizational Responses to HIV/AIDS Epidemic	2	Spring	
PubH 6259	Epidemiology Surveillance in Public Health	2	Spring	
PubH 6260	Advanced Data Analysis in Public Health	3	Fall, Spring	
PubH 6262	Introduction to Geographical Information Systems	1	Fall, Spring, Summer	
PubH 6263	Advanced GIS	1	Fall, Spring	
PubH 6267	Time Series Applications in Public Health	1	Spring	

PubH 6268	Advanced SAS	1	Summer	
PubH 6269	Reproductive and Perinatal Epidemiology	1	Summer	
PubH 6270	HIV/AIDS Surveillance	1	Summer	
PubH 6271	Disaster Epidemiology: Methods and Applications	1	Summer	
PubH 6272	Epidemiology of Infectious Agents Associated with Human Cancer	1	Summer	
PubH 6273	Ethnographic Methods as Applied to Public Health	1	Fall	
PubH 6274	Emerging Infectious Diseases for Public Health Professionals	2	Fall	
Department of Global Health				
PubH 6435	GH Program Design and Implementation	2	Fall, Spring	
PubH 6442	Comparative Health Systems	2	Fall	
PubH 6480	Humanitarian Operations	2	Fall, Spring	
PubH 6481	Global Mental Health	2	Spring	
PubH 6482	International Nutrition and Food Policy	2	Spring	
PubH 6484	Prevention and Control of Vector Borne Disease	2	Spring	
PubH 6499.xx	Advanced Quant. Methods in Global Health	1 or 2	Fall, Spring, Summer	
PubH 6530	Qualitative Methods in Health Promotion	2	Spring	
Practicum/Culminating Experience				
PubH 6014.13 or 6014.14 Practicum		2	See advisor	
PubH 6015.13 or 6015.14 Culminating Experience		2	See advisor	
<i>Course Distribution</i>		Credits		
Public Health Core Courses		16		
Epi/Bio Methods Courses		9		
GH Core Courses		9		
Elective Concentration Courses (from Global Health and Epi/Bio)		7		
Practicum		2		
Culminating Experience		2		
Total Degree Credits		45		

**Graduation Requirements
MPH**

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. **Grade Point Requirement.** A 3.0 (B average) overall grade point average is required.
4. **Time Limit Requirement.** The degree must be completed within four years.
5. **Transfer Credit Policy.** Up to 12 graduate credits that have not been applied to a previous graduate degree may be transferred to the MPH. Up to 18 credits may be transferred to the MPH from the SPHHS Graduate Certificate. Credits must have been earned from an accredited institution in the last 3 years with a grade point of 3.0 or better.

**Core Courses
16 Credits**

PubH (201)	6001	Biological Concepts for Public Health	2	Provides an overview of current knowledge about biological mechanisms of major diseases causing death and disability in the US and globally; understanding and interpreting the reciprocal relationships of genetic, environmental, and behavioral determinants of health and disease in an ecologic context; analyzing, discussing, and communicating biologic principles of disease from a public health perspective. Fall, Spring, Summer 1
PubH (202)	6002	Biostatistical Applications for Public Health	3	Application of biostatistical principles to critical analysis of retrospective studies, prospective studies, and controlled clinical trials, as well as studies in the health services literature. Selection, basic calculations, and interpretation of statistical methods for detection of significant associations and differences. Fall, Spring, Summer 10 weeks
PubH (203)	6003	Principles and Practice of Epidemiology	3	General principles, methods, and applications of epidemiology. Outbreak investigations, measures of disease frequency, standardization of disease rates, study design, measures of association, hypothesis testing, bias, effect modification, causal inference, disease screening, and surveillance. Case studies apply these concepts to a variety of infectious, acute, and chronic health conditions affecting the population. Fall, Spring, Summer 10 weeks

PubH (204)	6004	Environmental and Occupational Health in a Sustainable World	2	Examines the connection between population health and exposures to chemical, physical, and biological agents in the environment. Through the use of problem-solving frameworks, students will become familiar with data sources, methodologies and policy approaches being used to address the public health impacts of environmental and occupational health hazards, including the consequences of climate change, natural resource degradation, and industrial chemicals. The course will integrate key concepts of environmental health with principles of sustainability to illustrate how public policies and practices on the local, national and global level affect population health. Fall, Spring, Summer I
PubH (205)	6005	Policy Approaches to Public Health	2	Introductory multidisciplinary course focusing on the interplay of all aspects of global public health on health policy problems. Students will learn how health policy is made, how health care and public health services are delivered, and how to define and analyze key health policy problems drawing on the perspectives and skills of the public health disciplines. Fall, Spring, Summer 10 weeks
PubH (207)	6007	Social and Behavioral Approaches to Public Health	2	This course will emphasize social and behavioral science theories, models, and concepts that can be applied to public health problems and interventions. This course will describe the role of social and community factors, including race/ethnicity and culture, in both the onset and solution of public health problems and describe the inter-relationship between the social and behavioral science. Fall, Spring, and Summer 1
PubH (208)	6008	Management Approaches to Public Health	2	An advanced multidisciplinary course examining global public health and health delivery issues through the use of a case study approach. Prerequisites: PubH 6001, 6002, 6003, 6004, 6005, 6007. Fall, Spring , Summer 10 Weeks
Epidemiology Required Program Specific Courses 9 Credits				
PubH (247)	6247	Design of Health Studies	3	Epidemiologic concepts and methods applied to specific research questions especially new types of public health problems. Recognition and development of the most appropriate study design for a specific health issue. Ecologic, cross-sectional, case-control, cohort studies and clinical trials. Sampling, measurement, questionnaire design, causality and causal criteria. Development of a research proposal. Prerequisite: PubH 6003. Fall, Spring
PubH (249)	6249	Use of Statistical Packages: Data Management and Data Analysis	3	This course familiarizes the student with one of the most widely used database management systems and statistical analysis software packages, the SAS System, operating in a Windows environment. Throughout the course, several database management system techniques and data analytical strategies for the appropriate analysis of datasets obtained from a variety of studies will be presented. Statistical techniques covered include linear regression, analysis of variance, logistic regression, and survival analysis. Prerequisite: PubH 6002. Fall, Spring
PubH (252)	6252	Advanced Epidemiology Methods	3	Advanced quantitative epidemiologic methods, with a focus on basic data analytic techniques, identifying and evaluating bias and adjusting for confounding. Dose-response, trend analysis, and multiple linear and logistic regression models. Prerequisites: PubH 6002, 6003, 6247; Pre or co-requisite: PubH 6249. Fall, Spring

Global Health Required Program-Specific Courses 9 credits				
PubH (321)	6400	Global Health Frameworks	3	This course will provide a foundation of the various frameworks and techniques used to study global health. The frameworks examined will include epidemiology, anthropology, economics, human rights, and ethics among others. The perspectives studied will provide an introduction and understanding of how global health issues are framed, structured and presented. Fall
PubH (332)	6401	Comparative Regional Determinants of Health	2	This course examines the set of social, cultural and economic issues most central to shaping health in each of the world's main regions. Prerequisite: PubH 6400. Spring
PubH (335)	6402	Global Health Policy and Practice: Washington Seminar	2	This seminar course will provide an overview of global health policy and practice institutional resources in Washington DC. The course is designed to gain an understanding of how global health issues are framed, presented and biased in a multi-institutional setting. This is a collaborative learning exercise where simple web based tools will be used to develop a virtual classroom of the current global health policy and practice dialogue among Washington DC based governmental, multilateral, NGO, private sector and policy institutes. Fall, Spring
PubH (346)	6440	Global Health Economics and Finance	2	Fundamentals of macro- and microeconomics and financial analysis in international health including degree of centralization, public-private sector roles, and roles of international donor agencies. Prerequisite: PubH 6400. Spring
Elective Concentration Courses - Epidemiology and Global Health 7 credits				
PubH (260)	6260	Advanced Data Analysis for Public Health	3	An intensive course in advanced data analysis using the SAS System to expand on the analytic techniques gained in PubH 6002 and PubH 6249 and to provide students with the applied statistical skills required to analyze various types of public health datasets. Prerequisites: PubH 6002, 6249. Fall, Spring
PubH (242)	6242	Clinical Epidemiology and Decision Analysis	2	Quantitative and qualitative approaches to decision making, including risk- benefit analysis, decision analysis, and cost-effective analysis. Applications to technology assessment; development of clinical guidelines. PubH 6002,6003, Spring Note: MPH Health Policy and Doctoral Students concurrently take PubH 6299 topics course by the same name for 1 credit.
PubH (244)	6244	Cancer Epidemiology	2	Epidemiology of specific cancers, with an emphasis on molecular and genetic epidemiology. Current research in the field. Prerequisite: PubH 6003. Spring
PubH (245)	6245	Infectious Disease Epidemiology	2	The role and conduct of laboratory and field investigations in the epidemiology of infectious diseases. Prerequisite: PubH 6003. Spring
PubH (250)	6250	Epidemiology of HIV/AIDS	2	Methodological issues central to HIV/AIDS research. Biases peculiar to HIV/AIDS epidemiologic studies (both observational and experimental designs). The natural history of HIV, diagnosis, surveillance, vulnerable subpopulations, behavioral facets, and evaluation of epidemiologic studies with an emphasis on methodological considerations. Prerequisite: PubH 6003, Recommended 6002. Fall

PubH (253)	6253	Issues in HIV Care and Treatment	1	This course will provide an overview and in depth consideration of some of the major issues in treatment of HIV disease, including the assessment of efficacy and effectiveness, drug resistance, monitoring of drug toxicity, special populations, the interrelationship between treatment and prevention, and quality of care. The course has been designed with an interdisciplinary audience in mind. In discussions and assignments, students will be able to emphasize their own area of interest and/or expertise (e.g. epi, policy, etc). Fall
PubH (255)	6255	Organizational Responses to HIV/AIDS Epidemic	2	Focus on current epidemiologic challenges in HIV/AIDS; guest speakers describing their public health organizations' responses to these issues; and interactive dialogues to explore the strengths and limitations of various organizational approaches to the epidemic. Prerequisite: PubH 6250 (Epidemiology of HIV/AIDS), PubH 6559 (HIV Prevention: An Interdisciplinary Approach), or permission of Instructor. Spring
PubH (259)	6259	Epidemiology Surveillance in Public Health	2	This course focuses on foundations of public health surveillance systems for communicable as well as chronic diseases. Outbreak investigation methods will be included, as well as surveillance data sources, data management, data analysis, ethical issues, surveillance system evaluation, and use of information for prevention. Surveillance systems for reportable diseases, nosocomial infections, bioterrorism events, cancer, environmental disease, vaccine-related adverse events, bovine spongiform encephalopathy, and military personnel will be discussed. Prerequisite: PubH 6003. Spring
PubH (261)	6261	Epidemiology & Biostatistics Skills Building Seminar	1	Assists students in developing the skills needed to complete the practicum and culminating experience. Provides students with practical applied public health training. Prerequisites: PubH 6002, 6003, 6005. Co-requisites: PubH 6014 Practicum, PubH 6247, 6249. Fall, Spring, Summer I
PubH (262)	6262	Introduction to Geographical Information Systems	1	Geographic information systems (GIS) for mapping and display of health data. The course makes use of ArcGIS 8.3. The use of spatial statistics for the detection of clusters and patterns in the spread of diseases. Working with geodatabases, shape files, layers, query information from attribute tables, geocode addresses and customizing GIS applications. Summer, Fall, Spring
PubH (263)	6263	Advanced Geographic Information Systems	1	Structured to provide mid to advanced level training in GIS for display and analysis of health data. Use software ArcGIS 9.3 and additional extensions such as Spatial Analyst and Geostatistical Analyst. Also uses GeoDa software. Emphasizes benefits of using GIS to do more than simply manage and map data. GIS supports a range of spatial analysis functions that enable researchers to extract additional meaning from manipulating geographic data. Learn to work with raster datasets and geodatabases to build spatial models for analyzing health data and evaluating spatial patterns of health events based on notion of distance. Prerequisite: PubH 6262. Fall, Spring
PubH (267)	6267	Time Series Applications in Public Health	1	Introduce basic concepts for the identification and modeling of time series in the time domain approach. Learn a new set of terminology standards and a different way to analyze these types of data and to forecast future values of a time series and its accuracy. Software used is SAS/ETS and 3 procedures: ARIMA, AUTOREG, FORECAST. New mathematical notation will be used. Prerequisite: PubH 6249. Spring
PubH (268)	6268	Advanced SAS	1	Intensive in advanced programming using SAS. Expand technical skills to provide advanced SAS tools for data management and graphics. Topics to include Interactive Matrix Language (IML), SAS Macro facility language, and drill-down graphs using SAS/GRAPH. Prerequisites: PubH 6002, 6249 or Instructor's permission. Summer
PubH (269)	6269	Reproductive and Perinatal Epidemiology	1	Current research, controversial issues and methodological problems in epidemiology of reproductive and perinatal health. Present reproductive health issues such as conception and infertility; perinatal issues such as complications of pregnancy, infections in pregnancy, adverse pregnancy outcomes, and birth defects. Prerequisite: PubH 6003. Summer

PubH (270)	6270	HIV/AIDS Surveillance	1	Overview of surveillance methods used domestically and internationally to monitor HIV/AIDS epidemic. Surveillance systems including sentinel, population based, behavioral, and incidence surveillance will be presented and discussed. Strengths and weaknesses of these various systems will be discussed in addition to how data from these systems impact and inform HIV/AIDS related policies and programs. Prerequisite: PubH 6003. Summer
PubH (271)	6271	Disaster Epidemiology: Methods and Applications	1	Introduction to disaster epidemiology that elucidates the important role epidemiologists play in assessing the health and psychological effects of natural and man-made disasters and in identifying factors that contribute to these effects. Focus will be on applications of epidemiologic methods to the study of public health consequences of disasters, case studies from actual disasters used to illustrate various roles of epidemiologist in responding to these events and lessons learned. Highlight key skills that epidemiologists need to be part of a response and recovery. Identify methodological issues for future work. Prerequisites: PubH 6002, 6003. Summer
PubH (272)	6272	Epidemiology of Infectious Agents Associated with Human Cancer	1	Describes the role of infectious agents in the etiology of human cancer. Emphasis on differences between specific oncogenic viruses. Other oncogenic agents, bacterial and parasitic, will also be discussed. Discuss laboratory approaches to the documentation of their pathogenicity, how behavior affects mode of transmission, and which types of data provide strongest support for documenting oncogenic potential for humans. Prerequisite: PubH6003. Summer
PubH (273)	6273	Ethnographic Methods as Applied to Public Health	1	Use ethnographic field methods in conjunction with epidemiological research. Introduction to specific methods used to examine health phenomena and determinants of disease. Learn specific applied skills that can be modified with socio-cultural modifications to evaluate urban sites and other settings. Basic skills in application of ethnographic methods, including recursive observations, participant observations, and variety of approaches to interviewing such as in-depth, structured and non-structured as well as conversational interviewing. Discuss use of multiple approaches in conjunction with ethnography, including focus groups, archival, document, statistical and secondary data analysis, and survey research methods. Course emphasizes use of ethnographic research methods in community-based health settings and evaluates issues in cultural competency and how to garner stakeholder support to conduct epidemiologic studies. Prerequisite: PubH 6003. Fall
PubH (274)	6274	Emerging Infectious Diseases for Public Health Professionals	2	Focus on epidemiology of emerging infectious diseases of public health importance, including factors leading to their development, management of emerging infectious diseases from a public health and laboratory standpoint, including biosafety, and strategies for emergency preparedness from a national and international perspective. Course emphasizes the context of emerging infectious diseases and strategic approaches to their containment. Prerequisites: PubH 6003 or Micr 6292 or Instructor permission. Fall
PubH (322)	6442	Comparative Health Systems	2	The course examines what national health systems are, how they differ, and how they are performing. Health systems will be analyzed through four different lenses: Health Care Organization; Health Workforce Development; Health Care Financing and Health Policy Development. The course compares health systems and health reforms in seven regions of the world and draws lessons on how health system performance might be improved. Prerequisite: PubH 6400, PubH 6401. Fall
PubH (328)	6435	Global Health Program Development and Implementation	2	Basic concepts and principles of program development and implementation including data collection methods, decision making, and problem-solving techniques. Application of program development techniques to specific interventions. Prerequisite: PubH 6400, Co requisite: PubH 6003. Fall, Spring

PubH (348)	6482	International Nutrition and Food Policy	2	This course examines the major food and nutrition problems internationally, and the policies and programs aimed at addressing food insecurity, under- and over- nutrition, and micronutrient deficiencies. Through a combination of lectures (some delivered by invited experts), discussion sessions, seminal literature, and policy/program critique, the course strives to provide the background knowledge, state of the art strategies, and analytical tools necessary for future work in international nutrition. Prerequisite: PubH 6400 Spring
PubH (349)	6480	Humanitarian Operations	2	This course will analyze, through a variety of modules, including security institutions, vulnerable groups, humanitarian operations and natural disasters and global security, the impact of global health threats such as HIV/AIDS, SARS, avian flu, tuberculosis and malaria on security institutions, vulnerable populations, civil/military cooperation, and humanitarian operations. The course will also explore the potential value of these institutions in mitigating global health threats and responding to humanitarian emergencies. The course will examine a range of scientific, policy, and program interventions designed to address these issues. Prerequisite: PubH 6400. Spring
PubH (351)	6481	Global Mental Health	2	Focus on global mental health knowledge and public health policy implementation skills regarding the integration of mental health, public health, and primary care in diverse health systems and challenging cultural contexts. Prerequisite: PubH 6400. Spring
PubH (350)	6484	Prevention and Control of Vector Borne Diseases	2	Vector borne diseases involve a vector (carrier) that transmits a pathogen to a human host. This course introduces students to insects and other vectors that are responsible for transmission of diseases such as West Nile Virus, malaria, dengue fever, and elephantiasis. Students will learn how to recognize various disease vectors, how they transmit diseases, the diseases transmitted and methods for effective management and control. Prerequisite: PubH 6400. Fall
PubH (209)	6499.x x	Advanced Quantitative Methods in Global Health	1-2	This course will allow students to further develop quantitative research skills through advanced application using data relevant to global health topics. Students will combine quantitative analysis with study design, literature reviews, and results reporting. Prerequisites: PubH 6400, 6410, 6411, 6412. Fall, Spring
PubH (364)	6530	Qualitative Methods in Health Promotion	2	Application of qualitative methods in the development of health promotion interventions, evaluations, and research. Collecting and analyzing qualitative data through participant observation, interviewing, group methods, and case studies. Prerequisite: PubH 6007. Spring
Practicum and Culminating Experience – 4 credits				
PubH (214)	6014. xx	Practicum	2	This course provides the opportunity for MPH students to apply the knowledge and skills acquired through their programs of study. A planned, supervised and evaluated practice experience that is relevant to the student's program is an essential component of a public health professional degree program. These opportunities can take place in a variety of agencies or organizations. Each program customizes Practicum requirements to meet students' needs. (Credit/No Credit) Summer, Fall, Spring
PubH (215)	6015. xx	Culminating Experience	2	A culminating experience is one that requires a student to synthesize and integrate knowledge acquired in coursework and other learning experiences and to apply theory and principles in a situation that approximates some aspect of professional practice. It is through this course that faculty evaluates the extent to which the student has mastered the body of knowledge and can demonstrate proficiency in the required competencies. Each program customizes Culminating Experience requirements to meet students' needs. Summer, Fall, Spring

NOTE: Always see your advisor for course scheduling and sequencing strategies, but remember that proper course selection, fulfilling requirements, and on-time graduation are your responsibilities.

The Master of Public Health (MPH) curriculum consists of four types of courses:

- Required Core Courses (PubH 6001, 6002, 6003, 6004, 6005, 6007, and PubH 6008)
- Required Program-Specific Courses
- Concentration electives
- Required Practicum and Culminating Experience

The MPH core courses are designed to provide students with a broad public health context as well as a critical foundation for subsequent coursework. Early completion of these core courses ensures that students will have the base of knowledge to successfully complete the program specific courses and to get as much as possible out of them. As such, entering students are expected to enroll in MPH core courses in accordance with the following guidelines:

- We expect MPH students to complete a substantial number of the MPH core courses in their first year of graduate study (fall/spring/summer). This does not include PubH 6008 (Management Approaches to Public Health), which should be taken in the second half of the program of study, and which requires every other core course as a pre-requisite.
- Further, we expect MPH students to complete the following MPH core courses in the first two semesters of study:
 - PubH 6001 – Biological Concepts for Public Health
 - PubH 6002 – Biostatistics or PubH 6003 – Epidemiology
 - PubH 6005 – Policy Approaches to Public Health

These guidelines reinforce the principle that core courses should be taken early.

In order to help assure that all students complete core courses in the first year of study, SPHHS will offer all core courses during all three semesters (fall, spring, and summer). This will allow students who wish to complete their MPH degree within two years to do so, and will allow every student to make steady progress toward completing the MPH degree.

We recognize that there may be exceptional circumstances that make it difficult for a student to complete core courses in the first year as outlined above. Any such student should discuss this situation with his or her academic advisor. If the advisor and student agree that an exception is needed, the student should complete a Graduate Petition Form explaining the circumstances, obtain the academic advisor's signature, and submit the Petition to the SPHHS Office of Student Records, 202 Ross Hall. The Associate Dean for Student Affairs must approve such a petition before a student is permitted to defer any core courses to the second year.

Tables 1 and 2 (below) present sample course schedules that MPH Global Health Epidemiology students can follow during their tenure at the SPHHS. It is noteworthy that fully 45 credits are required, including core courses (17 credits), program-specific courses (18 credits), concentration electives (6 credits), and the practicum (2 credits) and culminating experience (2 credits).

Table 1. GWU School of Public Health and Health Services - MPH in Global Health Epidemiology (45 cr)

Sample Schedule for 2-Year Completion (Fall start)

Semester	Cr	Course #	Course Name	Time
Fall 1st year 11 credits	2	PubH 6007	Social and Behavioral Science Methods	Tues 4:10-6:00 pm or Wed 3:10-5:00 pm
	3	PubH 6003	Principles and Practice of Epidemiology	Tues 6:10 – 9:00 pm or Fri 3:10 – 6:00 pm
	3	PubH 6002	Biostatistical Applications for Public Health	Weds 6:10 – 9:00 pm or Mon 3:10-6:00 pm
	3	PubH 6400	Global Health Frameworks	Thurs 6:10 – 9:00 pm
Spring 1st year 10 credits	2	PubH 6001	Biological Concepts for Public Health	Thurs 4:10 – 6:00 pm
	3	PubH 6247	Design of Health Studies	Wed 6:10-9:00 pm
	2	PubH 6401	Comparative Regional Determinants of Health	Thurs 6:10-8:00 pm
	3	PubH 6249	Use of Statistical Packages	Mon 6:10-8:00 pm
Summer 1st year 4 credits	2	PubH 6004	Environmental & Occup Hlth in a Sustainable World	Mon & Wed 4:10-6:00 pm (Summer I)
	2	PubH 6005	Policy Approaches to Public Health	Tues & Thurs 1:00-2:15 pm (Summer 10-Week)
Fall 2nd year 11 credits	7	PubH 6xxx	Various Concentration Elective Courses from list	Various times
	2	PubH 6402	Global Health Policy and Practice: Washington Seminar	Tues 6:10-8:00 pm
	2	PubH 6008	Management Approaches to Public Health	Thurs 6:10-9:00 pm
Spring 2nd year 9 credits	3	PubH 6252	Advanced Epidemiologic Methods	Thurs 3:10-6:00 pm
	2	PubH 6440	Global Health Economics & Finance	Mon 6:10-8:00 pm
	2	PubH 6015	Culminating Experience ⁺	
	2	PubH 6014	Practicum ⁺	

Table 2. GWU School of Public Health and Health Services - MPH in Global Health Epidemiology (45 cr)

Sample Schedule for 2-Year Completion with option for international Practicum (Fall start)

Semester	Cr	Course #	Course Name	Time
Fall 1st year 11 credits	2	PubH 6007	Social and Behavioral Science Methods	Tues 4:10-6:00 pm or Wed 3:10-5:00 pm
	3	PubH 6003	Principles and Practice of Epidemiology	Tues 6:10 – 9:00 pm or Fri 3:10 – 6:00 pm
	3	PubH 6002	Biostatistical Applications for Public Health	Weds 6:10 – 9:00 pm or Mon 3:10-6:00 pm
	3	PubH 6400	Global Health Frameworks	Thurs 6:10 – 9:00 pm
Spring 1st year 12 credits	3	PubH 6247	Design of Health Studies	Wed 6:10-9:00 pm
	2	PubH 6401	Comparative Regional Determinants of Health	Thurs 6:10-8:00 pm
	2	PubH 6402	Global Health Policy and Practice: Washington Seminar	Tues 4:10-6:00 pm
	2	PubH 6440	Global Health Economics & Finance	Mon 6:10-8:00 pm
	3	PubH 6xxx	Various Concentration Elective Courses from list	Various times
Summer 1st year 6 credits	2	PubH 6001	Biological Concepts for Public Health	Tues & Thurs 3:45 – 6:00 pm (Summer I)
	2	PubH 6004	Environmental & Occup Hlth in a Sustainable World	Mon & Wed 4:10-6:00 pm (Summer I)
	2	PubH 6005	Policy Approaches to Public Health	Tues & Thurs 1:00-2:15 pm (Summer 10-Week)
Fall 2nd year 12 credits	2	PubH 6008	Management Approaches to Public Health	Thurs 6:10-9:00 pm
	3	PubH 6249	Use of Statistical Packages	Tues 6:10-9:00 pm
	3	PubH 6252	Advanced Epidemiologic Methods	Wed 6:10-9:00 pm
	4	PubH 6xxx	Various Concentration Elective Courses from list	Various times
Spring 2nd year 4 credits	2	PubH 6015	Culminating Experience ⁺	
	2	PubH 6014	Practicum ⁺	

+ Both the Practicum and the Culminating Experience require substantial lead time to plan. Make sure that you start planning your Practicum the semester before you wish to conduct it. Make sure that you start planning your Culminating Experience approximately 2 semesters before you plan to complete it.