REQUIREMENTS FOR MS STUDENTS IN THE GHE PROGRAM

Students enrolled in the GHE program are required to take a set of courses covering four core skill areas: EHS, biostatistics and epidemiology, international development, and environmental health policy with a focus on problems in low- and middle-income countries. Elective courses can be chosen from upper division and graduate courses in the four core areas or in a range of closely related fields including, but not limited to: international health, demography, maternal and child health, urbanization and health cities, nutrition and malnutrition, environmental sciences, environmental engineering, industrial hygiene and occupational health, and energy and resources.

Students in the Division of Environmental Health Sciences are required to complete an Integrated Learning Experience that demonstrates knowledge and skills gained in the MPH program in Environmental Health Sciences (EHS) or the MPH or MS program in Global Health and Environment (GHE). All students must choose to undertake either a capstone or a thesis.

All students are encouraged to actively define the overall trajectory of their degree program, and a student’s choice between a capstone and thesis plays a role in this. The capstone and thesis represent different but equally important approaches to examining a public health problem. With either option, students will incorporate the knowledge and skills gained through their coursework and other public health experiences into a final, culminating project and will also be able to describe how this culminating project contributes to their overall degree program and learning objectives.

Capstone Option

- The capstone allows students to make an applied contribution, such as the evaluation of an environmental health program, the development of an instrument, algorithm or method, a systematic review of the literature, or the development of a training manual for a community partner.
- Capstones allow students to delve deeper into a topic of interest, possibly expanding a course project or internship experience into new dimensions in order to further develop practical skills and professional experience.
- Students seeking more hands-on, practical environmental health skills—such as program evaluation, descriptive or exploratory research, needs assessment, proposal writing, or work with community partners—should choose a capstone.

Thesis Option

- The thesis enables students to develop skills in conducting research that tests a specific hypothesis(es) in environmental health by analyzing data and interpreting study results.
- The thesis study design must be appropriate for the data available and the scope of the student’s knowledge. The student’s Thesis Advisor can assist in determining the appropriate method of analysis for the project.
- Students who are interested in research-based careers often choose the thesis.

Both capstones and theses can solve important problems in the field; can yield publishable contributions in the literature; and can contribute new thinking on a topic.
Required Courses

Environmental Health Sciences (3 Courses, courses in **bold face** are required)

**PB HLTH 270**  
Introduction to Environmental Health Sciences (first term if possible) (3) (F)

**PB HLTH 270A**  
Exposure Assessment and Control I (3) (Sp)

PB HLTH 260A  
Principles of Infectious Disease (4) (F)

or PB HLTH 270B  
Toxicology I (3) (F)

CRP 204C  
Introduction to GIS and City Planning (4) (Sp)

Biostatistics and Epidemiology (3 Courses, courses in bold face are required)

PB HLTH 142  
Introduction to Probability & Statistics in Public Health (4) (F, Sp)

or PB HLTH 141  
Introduction to Biostatistics (4) (Su)

PB HLTH 250A  
Epidemiological Methods – I (3) (F, Su)

or PB HLTH 250B  
Epidemiological Methods – II (4) (F)

PB HLTH 145*  
Statistical Analysis of Continuous Outcome Data (4) (F)

PB HLTH 241  
Statistical Analysis of Categorical Data (4) (Sp)

PB HLTH 245  
Introduction to Multivariate Statistics (4) (F)

*PH HLTH 145 will not be offered in fall 2017

Students should take a minimum of 3 courses in either one of the following categories: (1) International Development or (2) Environmental Health Policy

**International Development**

ARE/PP C25  
International Economic Development Policy (3) (F)

ARE C251/ Econ C270A  
Microeconomics of Development (3) (F)

Demography/ Econ C275A  
Economic Demography (3) (Sp)

CRP 115/ Practice 115  
Global Poverty and Global Poverty: Challenges and Hopes in the New Millennium (4) (F)

CRP 251  
Housing in Developing Countries (3) (F)

Develop.Studies C100 /Geography 112  
History of Development and Underdevelopment (4) (Sp)

ERG 275  
Water and Development (4) (Sp, even years)
Environmental Health Sciences  
Global Health & Environment (GHE)

ESPM 169 Governance of Global Production (3) (Sp)
ESPM 260 International Environmental Politics (4) (F)
PB HLTH 213A Family Planning, Population Change and Health (3) (F)
PB HLTH 226D Global Health Economics (3) (F)

Environmental Health Policy
PB HLTH 290 Global Air Quality and Public Health (2) (Sp)
PB HLTH 271E Science and Policy for Environment and Health (3) (Sp)
PB HLTH 220C Health Risk Assessment, Regulation and Policy (3) (Sp)
ERG 102 Quantitative Aspects of Global Environmental Problems (4) (Sp)
PB HLTH 235 Impact Evaluation for Health Professionals (3) (F)

GHE Project Seminar (3-6 units to be taken during the last semester or during the summer)

PB HLTH 299 GHE Project Seminar (3-6) (F, Sp)

Elective Courses

Remaining units to be chosen from upper division or graduate courses in the above areas and from courses in a range of closely related fields, including but not limited to the following:

PB HLTH 212D Global Health Core Course (3) (Sp) [required for the Global Health Specialty Area certificate – not environmentally oriented]
PB HLTH 292 International Internship Seminar (1) (F, Sp)
PB HLTH 212A International Maternal & Child Health (2) (F)
PB HLTH 267B Characterization of Airborne Contaminants (3) (Sp, every odd yr)
CE 111 Environmental Engineering (3) (F, Lab offered in Sp)
CRP 256 Healthy Cities (3) (F)
ESPM 167/ PB HLTH C160 Environmental Health and Development (4) (Sp)
PB HLTH 219E Introduction to Qualitative Methods in Public Health Research (3) (Sp)
PB HLTH 205 Program Planning, Development, and Evaluation (3) (Sp)
PB HLTH 260B Principles of Infectious Disease (4) (Sp)
PB HLTH 206D Food and Nutrition Policies and Programs in Developing Countries (3) (F, every even yr)
PB HLTH 271G Public Health Implications of Global Climate Change (3) (Sp) By petition
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PB HLTH 211</td>
<td>Health and Human Rights</td>
<td>3</td>
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<td>PB HLTH 252C</td>
<td>Intervention Trial Design</td>
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<td>CRP 220</td>
<td>Urban and Regional Economy</td>
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<td>ESPM 290-P009</td>
<td>Biodiversity and Human Health</td>
<td>3</td>
<td>Sp</td>
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<td>PB HLTH 253B</td>
<td>Epidemiology and Control of Infectious Diseases</td>
<td>3</td>
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<tr>
<td>PB HLTH 271C</td>
<td>Drinking Water and Health</td>
<td>3</td>
<td>Sp</td>
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