

Environmental Health Sciences

Global Health & Environment (GHE) MS Curriculum

GHE students have six semesters in which to complete requirements for their degrees.

The program requires a minimum of 24 units of upper division graduate courses. At least 12 of these units must be in graduate courses (200 level) in the student's major subject. Additionally, no more than 6 units may be research units (PH 299). GHE students graduating under Plan II will complete an original research project, such as a full literature review or a research paper utilizing pre-existing data. For students in the GHE program, A minimum of 41 units are to be completed in these core areas, and a total of 52 units are required to complete the program, including the completion of a 3 unit research project seminar. (See the GHE curriculum below).

Students enrolled in the GHE program are required to take a set of courses covering four core skill areas: environmental health sciences; biostatistics and epidemiology; development trends, theory and economics; and policy and risk analysis. Elective courses can be chosen from more advanced 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.

GHE Core Skill Areas and Required Courses

1. Environmental Health Sciences (10 units):

PH 292 Environmental Health Sciences Masters Seminar (F) (S/U) 1 unit
PH 270B Advanced Toxicology (F) 3 units
or PH 260A Principles of Infectious Disease (F) 3 units
ESPM 167 Environmental Health and Development (F) 3 units
PH 270A Exposure Assessment and Control (F) 3 units

2. Biostatistics and Epidemiology (11-12 units):

PH 142 Introduction to Probability and Statistics in Biology (F) 4 units
Or PH 145 * Statistical Analysis of Continuous-Outcome Data (Sp) 4 units
PH 250A Epidemiological Methods I (F) 4 units
Or PH 250B*Epidemiological Methods-II(F) 4 units
PH 259B Epidemiologic Methods in Developing Countries (F) 3 units
Or 254 Occupational and Environmental Epidemiology (Sp) 3 units
C 120/ERG 130 Analysis of Environmental Data (F) 3 or 4 units
PH 241 Statistical Analysis of Categorical Data (Sp) 4 units
PH 245 Introduction to Multivariate Statistics (F) 4 units
**Students with previous work in statistics or epidemiology should take these options*

3. Development Trends, Theory and Economics (8 units from the following):

AREP 251/Econ 270A Agriculture in Economic Development (F) 3 units
AREP 271 International Food and Nutrition Policies (Sp) 3 units
Demography C275A Economic Demography (F, Sp) 3 units
Econ C171 Economic Development (F) 4 units
Geography 130 Natural Resources and Population (F, Sp) 4 units
Geography C214 Development Theories and Practice (Sp) 3 units
ESPM 165** International Rural Development Policy (Sp) 4 units
ESPM 251** International Conservation and Development Policy (Sp) 3 units
CRP 251 Environmental Planning and Regulation (F) 3 units
CRP 270 Regional & Urban Development Strategies in Third World (Sp) 3 units

PH 213A Family Planning, Population Change and Health (F) 3 units
**Department will decide in fall whether these courses will be offered.

Possible Substitutions*:

ED 265B Economic Development and Education in the Third World 3 units
ERG 151 Politics of Energy and Environmental Policy (F) 4 units
ERG 282 Resources, Ecology and Develop: Social Science Response (F) 3 units
PS 208 Development Policy (F/Sp) 4 units
WS 241 Women and World Development 4 units

*Substitutions must be chosen in consultation with Student's advisor

4. Policy and Risk Analysis (10-11 units):

(If all 4 courses are taken, one may be considered to be an elective)

ERG 102 Quantitative Aspects of Global Environmental Problems (Sp) 4 units
PH 271D Global Burden of Disease/Comparative Risk Assessment (Sp) 3 units
PH 298.28 Issues in Environmental Health Policy (F) 3 units
PH 220C Risk Assessment Policy and Toxics Regulation (Sp) 4 units

5. HED Project Seminar (3 units, to be taken during the last semester or possibly during the summer):

PH 299 GHE Project Seminar 3 units

6. Elective Courses -- sample list is available (remaining 10-11 units to be chosen from more advanced courses in the above areas and courses in a range of closely related fields) **Required & Elective GHE courses may change, please refer to EHS website for updates: http://ehs.sph.berkeley.edu/images/current/ms_phd.pdf**