

MPH CONCENTRATION GLOBAL ENVIRONMENTAL SUSTAINABILITY & HEALTH

Educational Objectives:

The MPH concentration in Global Environmental Sustainability and Health provides students with an understanding of how human consumption and standards of living have exceeded the carrying capacity of the earth; how, as a result, the environmental resources upon which we depend have been severely compromised; and how this affects the health of individuals, communities, and the global population. Specifically, students will learn how land use (including patterns of suburban sprawl), transportation patterns and systems, energy use, food production and distribution, water use, and population growth contribute to climate change, ecosystem degradation, and species extinctions and biodiversity losses, and how these, in turn, threaten human health on local, regional, and global scales.

The goal of this concentration is to provide students with the necessary knowledge about the drivers of global environmental change and the consequences for health. In addition, students will gain necessary skills to develop appropriate responses to augment global environmental sustainability through qualitative research methods and behavioral change interventions.

The objectives of the MPH concentration include:

1. Acquire key knowledge of the drivers of global environmental change and potential actions to decrease harm:
 - a. Identify the five main drivers of global environmental change: land use, energy use, food use (i.e., food production and distribution), water use, and population growth.
 - b. Explain how these drivers interact with each other to result in global environmental consequences such as climate change, ecosystem degradation, biodiversity loss, and species extinctions.
 - c. Describe the complexities and interrelationships of these drivers and their environmental consequences.
 - d. Explain the implications of the consequences to individual, community, and global health.
 - e. Compare and contrast actions to improve global sustainability and health in the context of the complicating challenges of “after peak oil,” U.S. federal indebtedness, and myriad political obstacles.
 - f. Describe the types of organizations and businesses working on addressing the problem of global environmental change, and the approaches each type is taking to producing change.
2. Develop a set of intervention skills to change behavior.
 - a. Present information on global environmental change and possible responses to reduce harm for a range of audiences (e.g., professional groups, community organizations, schools).
 - b. Select models and theories relevant to the design of behavior change interventions for different groups and behaviors, and apply them in design of the intervention.

- c. Develop a plan for behavior change communication for behaviors related to sustainable use of the environment.

The minimum number of academic units needed to complete the concentration requirements is 18 units.

Course of Study:

Students are required to complete all of the following courses:

- 180.611 The Global Environment & Public Health (4 units) – 1st term
- 188.688 Global Environmental Sustainability & Health Seminar (1 unit each) – 2nd and 4th term
- 180.651 Energy Policy Choices & Public Health (2 units) – 3rd term
- 188.682 Buildings, Land Use, Transportation, and Public Health (2 units) – 4th term

Students are required to take one of the following courses:

- 180.620 Food Production, Public Health & the Environment (4 units)–2nd term, Internet Only
- 222.654 Food, Culture, and Nutrition (4 units) – 4th term
- 180.655 Baltimore Food Systems: A Case Study of Urban Food Environments (4 units)–3rd T

Students are required to take one of the following courses:

- 224.689 Health Behavior Change at the Individual, Household and Community Levels* (4 units) – 2nd term
- 410.650 Introduction to Persuasive Communications: Theories and Practice* (4 units) – 2nd term

The following courses are recommended but not required. These courses do not fulfill credit requirements of the concentration but do contain relevant content or skills:

- 221.629 Environmental & Population Health in Emergencies (2 units) – 2nd term
- 260.652 Principles of Public Health Ecology (4 units) – 2nd term
- 182.640 Food- & Water-borne Diseases* (3 units) – 3rd term
- 182.626 Tropical Environmental Health (2 units) – 3rd term
- 221.624 Urban Health in Developing Countries (3 units) – 4th term, Internet only

*Also fulfills MPH core requirement

Capstone Experience

The MPH capstone experience in Global Environmental Sustainability and Health provides students with the opportunity to apply the skills and competencies they have learned to a global environmental sustainability and public health problem that is of particular interest to them. During the 3rd term, students may register for 2 units of special studies research (xxx.840) for the capstone experience under the supervision of a growing list of concentration-affiliated faculty mentors. In 4th term, students are required to register for the 2 unit Capstone Course (xxx.800). The special studies research and informal lunchtime meetings of the concentration will take the place of the sustainability seminar during 3rd term. The capstone can also involve participating in faculty research related to the global environment and sustainability, working with the Center for a Livable Future or the Center for Water and Health, or collaborating with local organizations engaged in action to address

these issues. The resulting paper from the capstone experience will satisfy MPH capstone requirements and will be of publishable quality. The capstone projects will be presented at a specially-scheduled concentration capstone symposium, depending on number of students.

Faculty Concentration Directors

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