

# Environmental Health (ENVH)

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## Courses

### **ENVH 1103. International Health. 3 Credit Hours.**

This course examines avenues of international cooperation in health and explores the most significant health problems and resources in developing and developed countries by focusing on international differences in health status, social/economic/political factors in health care, varied approaches to providing health services, the role of health workers, and the involvement of foundations and multilateral and bilateral agencies. Public Health majors, minors or students studying the Public Health concentration must complete this course with a C or better.

**Repeatability:** This course may not be repeated for additional credits.

### **ENVH 1903. Honors International Health. 3 Credit Hours.**

This course examines avenues of international cooperation in health and explores the most significant health problems and resources in developing and developed countries by focusing on international differences in health status, social/economic/political factors in health care, varied approaches to providing health services, the role of health workers, and the involvement of foundations and multilateral and bilateral agencies. Public Health majors, minors or students studying the Public Health concentration must complete this course with a C or better.

**Cohort Restrictions:** Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

**Course Attributes:** HO

**Repeatability:** This course may not be repeated for additional credits.

### **ENVH 2102. Environmental Health. 3 Credit Hours.**

This introductory course incorporates not only the common concepts associated with environmental health (such as population dynamics, air pollution, water pollution, and land pollution) but also emerging and controversial issues associated with environmental threats to human health, such as emerging diseases, global warming, and biological and chemical weapons. Emphasis is on biological, chemical, and physical sources of exposures, the effects on human health, and the methods of limiting exposures and effects. Public Health majors, minors or students studying in the Public Health concentration must complete this course with a C or better.

**Field of Study Restrictions:** Must be enrolled in one of the following Fields of study: Public Health.

**Level Registration Restrictions:** May not be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

### **Pre-requisites:**

HRPR 1001|Minimum Grade of C|May be taken concurrently

OR PBHL 1101|Minimum Grade of C|May be taken concurrently

OR PBH1 Y|May not be taken concurrently

OR CRHR01 Y|May not be taken concurrently.

### **ENVH 5004. Environmental Health. 1.5 Credit Hour.**

ENVH 5004 is a required foundational, introductory course for the MPH degree programs, and as such serves as an introduction to the various aspects of the Environmental Health field. The course incorporates not only the common concepts associated with environmental exposures (air, water, soil, food, etc.) but also legacy and emerging issues associated with environmental threats to human health, including the potential impacts of emerging contaminants on human health. The emphasis is on biological, chemical, and physical sources of exposures, their salient characteristics, potential effects on human and ecological health, and the modern responses (methods, actions, and policies) for limiting exposures and effects.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**ENVH 5013. Global Environmental Health. 3 Credit Hours.**

This is an intermediate-level graduate course for those interested in environmental health and global health. Other graduate students may attend the course with the instructor's permission, provided they meet the course prerequisites. This course does not meet the core requirement for environmental health in the MPH program.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**

ENVH 5103|Minimum Grade of B-|May not be taken concurrently

OR PBHL 5103|Minimum Grade of B-|May not be taken concurrently.

**ENVH 5305. Environmental Toxicology. 3 Credit Hours.**

This course reviews the absorption, distribution, metabolism, and excretion of environmental toxicants. Methods used to measure acute and chronic toxicity, including carcinogenesis, are explored.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**College Restrictions:** Must be enrolled in one of the following Colleges: College of Public Health, Social Work.

**Repeatability:** This course may not be repeated for additional credits.

**ENVH 5309. Water, Sanitation and Public Health. 3 Credit Hours.**

This is an intermediate-level graduate course for those interested in water, sanitation and hygiene and the implications on public health. Graduate students from the College of Public Health or from Engineering, Environmental Sciences or other related fields may attend the course with the instructor's permission. The course explores the importance of water, sanitation and hygiene on public health. The course is designed for the students to get hands-on learning about selecting and designing appropriate water and sanitation interventions as well as selecting methods for evaluating the public health impact of these interventions.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**ENVH 8016. Human Health Risk Analysis. 3 Credit Hours.**

This course is an introduction to the use of stochastic modeling to identify, assess, and manage environmental health hazards, risk assessment, and analysis through the lens of public health. Students will develop an understanding of the underlying sciences and mathematics that fall within exposure science and use Markov chain method to build exposure models.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**

EPBI 5002|Minimum Grade of B|May be taken concurrently

OR PBHL 5002|Minimum Grade of B|May be taken concurrently.

**ENVH 8019. Environmental Policy and Regulation. 3 Credit Hours.**

This is an upper-level graduate course that focuses on the concepts of policy and regulatory systems meant for the protection and management of the environment in the United States, including the evolution of the regulatory systems and policy making process to address both legacy and emerging environmental issues and the factors that shape these policies and regulations. Emphasis will be placed on the development of the standards, enforcement, and compliance of selected federal environmental regulations and their equivalent enforcements at the state and local levels, and ultimately, how those regulations influence public health. The course might be of interest to those interested in understanding environmental policy and regulation in the U.S., identifying means to facilitate changes in environmental policy for human health and environmental protection, and how it provides foundation for other international policies and laws pertaining to environmental management and sustainability. Students may find this as an applied policy- and decision-making course. The course will bring in other experts, either in the form of team teaching or guest speakers, who will offer relevant and timely perspectives on topics of significant interest.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**

(PBHL 5005|Minimum Grade of B-|May not be taken concurrently  
OR SBS 5005|Minimum Grade of B-|May not be taken concurrently  
OR HPM 5005|Minimum Grade of B-|May not be taken concurrently)  
AND (PBHL 5103|Minimum Grade of B-|May not be taken concurrently  
OR ENVH 5103|Minimum Grade of B-|May not be taken concurrently)

**ENVH 8207. Environmental Epidemiology. 3 Credit Hours.**

This intermediate course will cover selected topics in occupational and environmental epidemiology through a focus on specific health outcomes, such as non-malignant respiratory diseases, cancer, and musculoskeletal disorders, within the context of particular study designs or exposures. Students will have the opportunity to critically examine the current literature and to study contemporary issues in research. Exposure assessment, biomarkers, and emerging diseases within the context of the workplace and the environment will be addressed.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**

(ENVH 5004|Minimum Grade of B-|May not be taken concurrently  
OR ENVH 5103|Minimum Grade of B-|May not be taken concurrently)  
AND (EPBI 5201|Minimum Grade of B-|May not be taken concurrently  
OR PBHL 5201|Minimum Grade of B-|May not be taken concurrently  
OR EPBI 5101|Minimum Grade of B-|May not be taken concurrently  
OR PBHL 5101|Minimum Grade of B-|May not be taken concurrently)

**ENVH 8309. Exposure Assessment. 3 Credit Hours.**

Exposure assessment is the multidisciplinary field that identifies and characterizes exposure to environmental agents; develops estimates of exposure for epidemiology, exposure-response, trend and surveillance, and risk assessment studies; and evaluates the significance of exposure of effectiveness of intervention strategies.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**ENVH 9289. MPH Fieldwork I. 3 Credit Hours.**

This course entails a fieldwork project or internship in a public health agency. It includes seminars, oral and written reports of progress, and joint supervision by a preceptor and faculty member.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.

**Pre-requisites:**

(EPBI 5201|Minimum Grade of B-|May not be taken concurrently)  
AND (EPBI 5002|Minimum Grade of B-|May not be taken concurrently)  
AND (EPBI 5005|Minimum Grade of B-|May not be taken concurrently)  
AND (HPM 5006|Minimum Grade of B-|May not be taken concurrently)  
AND (SBS 5001|Minimum Grade of B-|May not be taken concurrently)  
AND (EPBI 8012|Minimum Grade of B-|May be taken concurrently)

**ENVH 9389. MPH Fieldwork II. 3 Credit Hours.**

This course is an evaluation of the fieldwork project or internship using a full range of research methodologies. Data are collected, analyzed, and reported in a comprehensive final report. Oral and/or poster presentations are presented to public health organizations. The course includes a final oral defense of the project or internship.

**Level Registration Restrictions:** Must be enrolled in one of the following Levels: Graduate.

**Repeatability:** This course may not be repeated for additional credits.