# Public Health, Environmental Health (PHEH)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).

500-level courses generally are included in both the undergraduate- and graduate-level course listings; however, specific course/section offerings may vary between semesters. Students are responsible for ensuring that they enroll in courses that are applicable to their particular academic programs.

## Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (https://louisville.edu/bursar/tuitionfee/university-fees/).

## Course Descriptions

### PHEH 101. Nutrition 4 You - S

**Term Typically Offered:** Fall, Spring  
**Description:** The intersection of personal nutrition and health will be explored within the context of nutritional sciences. The major nutrients including protein, fat, carbohydrates, minerals, and vitamins will be introduced. The concept of nutrition within society will be discussed with a focus on applying nutrition principles to maintain a healthy diet and limiting risk of chronic diseases as well as evaluating the influence of advertising on food choice.  
For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).

### PHEH 301. Public Health and Our Environment

**Term Typically Offered:** Fall, Spring  
**Prerequisite(s):** BIOL 102 (or higher) or CHEM 101 (or higher).  
**Description:** This course delineates the impact of the environment on human health through consideration of physical, chemical, and biological factors. Topics include physical, chemical, and biological agents of environmental contamination; vectors for dissemination (air, water, soil); solid and hazardous waste; susceptible populations; governmental organizations that address risks, the scientific basis for policy decisions; and emerging global environmental health problems.  
For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).

### PHEH 305. Environmental Toxicology

**Term Typically Offered:** Fall Only  
**Prerequisite(s):** PHEH 301 or CHEM 101 (or equivalent chemistry course).  
**Description:** This course will cover basic foundations of toxicology with emphasis on how environmental toxicants affect human health. Topics include principles of toxicology, survey of toxicants and their effects, organ-specific toxicity, regulatory toxicology, and development of critical thinking skills to assess health risks.  
For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).

### PHEH 315. Environmental Health and Public Health Practices

**Term Typically Offered:** Fall, Spring  
**Prerequisite(s):** Successful completion of PHEH 301.  
**Description:** This course will cover the practice of public health as related to areas typically falling under the umbrella of environmental health, including assessment of environmental hazards in air and water, food safety, swimming pool safety, vector control, and emergency preparations. Details of environmental health practice will be presented in the context of regulatory framework and scientific basis of environmental hazards.  
For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).

### PHEH 325. Public Health Nutrition

**Term Typically Offered:** Fall Only  
**Description:** This course will cover the practice of public health as related to areas typically falling under the umbrella of environmental health, including assessment of environmental hazards in air and water, food safety, swimming pool safety, vector control, and emergency preparations. Details of environmental health practice will be presented in the context of regulatory framework and scientific basis of environmental hazards.  
For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).

### PHEH 320. Environmental Policy and Risk Assessment in Public Health

**Term Typically Offered:** Fall, Spring  
**Description:** This course provides an overview of the development and implementation of environmental health policy at local, national, and global scales and the role of risk analysis. Case-examples will provide in-depth assessments of environmental health policy and specific risk analysis topics.  
For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).

### PHEH 327. Public Health Nutrition

**Term Typically Offered:** Fall, Spring  
**Description:** This course will provide an introduction to the identification and prevention of nutrition related disease at the community and population level. Tools and measures for assessing nutritional status in the individual and group will be introduced. The history of the Dietary Guidelines for Americans will be introduced and the relevance to the Supplemental Nutrition Assistance Program (formerly known as FoodStamps) and other nutritional assistance programs will be investigated.  
For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm).
PHEH 330. Childhood Nutrition from a Public Health Perspective 3 Units
Term Typically Offered: Fall Only
Prerequisite(s): One semester of BIOL 102.
Description: This course explores the USDA childhood nutrition support programs including the national school breakfast and lunch programs, the Women, Infants and Children (WIC) program, and community nutrition education programs that target children. The role of food advertising on childhood food preferences as well as dietary patterns for children of various ages within the US Dietary Recommendations will be introduced. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

PHEH 331. Food Composition and Public Health 3 Units
Term Typically Offered: Fall, Spring
Description: The biological basis of nutrition including nutrient composition of food, function of the digestive system, and the contributions of nutrition sciences to the practice health will be covered with an emphasis on the nutritional foundations of a healthy society. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

PHEH 332. Nutrition Assessment Tools 3 Units
Term Typically Offered: Spring Only
Prerequisite(s): Successful completion of PHEH 101 or PHEH 331 or HSS 302 or HSS 303.
Description: This course introduces the practices of nutritional assessment in target populations and communities including national health surveys and relevant epidemiological study designs. Students will become familiar with tools for assessment of nutritional status in at-risk populations and in support of national surveillance programs and the interpretation of findings with relevance to policy objectives. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

PHEH 440. Biology for Population Health 3 Units
Term Typically Offered: Fall, Spring
Prerequisite(s): Successful completion of BIOL 102 (or equivalent).
Description: The course explores the biology, anatomy, biochemistry, physiology, and pathophysiology of selected acute and chronic diseases from a public health perspective. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

PHEH 450. Undergraduate Research in Environmental Health 3 Units
Term Typically Offered: Fall, Spring
Prerequisite(s): Permission of Instructor.
Description: This course introduces students to environmental health research and data analysis. The course consists of readings, data collection, data processing, statistical analysis, and dissemination of findings. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

PHEH 500. Introduction to Environmental and Occupational Health Sciences 3 Units
Prerequisite(s): Enrollment in School of Public Health and Information Sciences.
Description: This course provides students with the basic concepts and principles of environmental health and occupational health including environmental agents in water, air and soil, such as chemicals, biological and physical agents, and other important factors that may constitute a risk to humans. It also provides an overview of the basic principles and methods of risk assessment and risk management. This course is designed for all public health practitioners and meets the core environmental health requirement for the MPH degree program. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

PHEH 525. Biological Basis for Parasitic and Infectious Diseases 1 Unit
Prerequisite(s): PHEH 500 (or concurrently).
Description: This course will provide an overview of key biological concepts related to the pathogenic responses of humans to infectious and parasitic agents. The central questions addressed by the course include: What strategies are used by different types of pathogens to interact with host cells and what physical/cellular barriers impact host infectious/parasite interactions; and how do host cells/organisms respond to different types of pathogens through innate and adaptive immune responses to infectious/parasitic diseases. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

PHEH 526. Nutrition and Maternal and Child Health 3 Units
Term Typically Offered: Spring Only
Description: This course covers the scientific foundations of human nutrition and digestion, methodologies for nutritional assessment in at-risk populations, and the impact of food scarcity/nutritional inadequacy on maternal/child. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)