# Environmental Health Sciences (EHS)

**EHS 50060  PUBLIC HEALTH LABORATORY METHODS  3 Credit Hours**
This course introduces the student to the fundamental theory and hands on use to track specimen collection and laboratory analysis. Environmental specimens will be examined for their public health importance using classical and modern techniques. The student will spend time learning classical laboratory methods and their modern use in the laboratory environment. Examples include culture and microscopic identification of microorganisms, identification of disease vectors, detection of newborn disease and detection of terrorism agents. Prerequisites: PH 30006 or CHEM 10062 or CHEM 10971 or BSCI 30140 or instructor approval
Schedule Type: Combined Lecture and Lab
Contact Hours: 3 lecture, 1 lab
Grade Mode: Standard Letter

**EHS 50109  LABORATORY SAFETY AND HYGIENE  3 Credit Hours**
(Crosslisted with EHS 40109) Basic introduction to laboratory safety, chemical hygiene, and biosafety. Includes the research compliance programs of institutions (IBC, IACUC, IRB, RSC) and the OSHA Chemical Hygiene Standard requirements and program responsibilities. General lab safety concepts are reviewed, along with chemical handling and storage, fume hoods and ventilation, hazardous waste disposal, radiation safety, and lab design. Basic principles of biosafety are covered, BSL 1-4 levels, biosafety cabinets, select agents, bloodborne pathogens, NIH Guidelines, biosecurity and animal use. Prerequisite: Graduate standing.
Schedule Type: Field Experience, Lecture
Contact Hours: 2.67 lecture, .33 other
Grade Mode: Standard Letter

**EHS 50196  INDIVIDUAL INVESTIGATION IN ENVIRONMENTAL HEALTH SCIENCES  1-3 Credit Hours**
(repeatable for maximum 6 credits) Individual graduate investigation or research in areas related to environmental health sciences. Prerequisite: graduate standing and special approval.
Schedule Type: Individual Investigation
Contact Hours: 1-3 other
Grade Mode: Standard Letter-IP

**EHS 52018  ENVIRONMENTAL HEALTH CONCEPTS IN PUBLIC HEALTH  3 Credit Hours**
Provides a comprehensive overview of the core topics in environmental health as related to public health. Prerequisite: graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

**EHS 53009  EMERGING ENVIRONMENTAL HEALTH ISSUES AND RESPONSE  3 Credit Hours**
Provides an overview of emerging environmental health issues that will impact the public's health. Prerequisite: graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

**EHS 53012  OCCUPATIONAL SAFETY AND HEALTH  3 Credit Hours**
Survey of major concepts and issues relating health and safety in the workplace. Emphasis is on the application of public health principles and decision-making practices used by various worker populations for the prevention of injury and disease on the job. This course will cover protective equipment, hazardous conditions, environmental toxins, risk assessment, prevention science approaches and workplace health promotion. Prerequisite: graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

**EHS 53014  BUILT ENVIRONMENT AND PUBLIC HEALTH  3 Credit Hours**
The focus of this course is on preventing disease and injury while improving the health of populations by looking “upstream” at the built environment or those settings designed, created, and maintained by human efforts. Public health effects of community design will be explored, including transportation, land use, parks and green space in the context of physical activity, food environments, air and water quality, injury prevention, social capital and health disparities. Components of healthy communities will be explored in the home, workplace, schools, and health care facilities. Students will examine strategies for creating sustainable health places consistent with the ecological model, through multidisciplinary collaboration, research, and policy to promote the health of populations.
Prerequisite: Graduate standing.
Schedule Type: Seminar
Contact Hours: 1-3 other
Grade Mode: Standard Letter

**EHS 60191  VARIABLE CONTENT SEMINAR IN ENVIRONMENTAL HEALTH SCIENCES  1-3 Credit Hours**
(Repeatable for a maximum of 6 credit hours) Seminar on current and important topics in environmental health sciences. Subject matter varies depending on the topic. Prerequisite: Graduate standing.
Schedule Type: Seminar
Contact Hours: 1-3 other
Grade Mode: Standard Letter

**EHS 60192  PRACTICUM EXPERIENCE IN ENVIRONMENTAL HEALTH SCIENCES  1-6 Credit Hours**
Observational and participation in public health activities of a public health agency, hospital or other approved organization. The student completes the field experience with joint supervision from the university and approved organization or agency. Prerequisite: graduate standing and special approval.
Schedule Type: Practicum or Internship
Contact Hours: 20 other
Grade Mode: Satisfactory/Unsatisfactory-IP

**EHS 60195  SPECIAL TOPICS IN ENVIRONMENTAL HEALTH SCIENCES  1-3 Credit Hours**
(Repeatable for a maximum of 6 credit hours) Special topics to sample new offerings on topics in environmental health sciences. Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 1-3 lecture
Grade Mode: Standard Letter
EHS 63010  APPLIED RISK ASSESSMENT  3 Credit Hours
Introduces the student to environmental and occupational hazards, assessing the risks associated with hazard exposure. Standard principles of risk assessment are emphasized including methods of hazard identification and regulation, quantitative exposure measurement, dose and toxicity relationships and risk management. Analysis of public policy regulatory guidance and health advisory watchdog recommendations are evaluated.
Prerequisite: EPI 52017 and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

EHS 63011  APPLICATION OF RISK ANALYSIS IN ENVIRONMENTAL HEALTH  3 Credit Hours
Students are introduced to methods in risk analysis that are applied by U.S. federal, state, and local agencies in their assessment of chemical toxicants. Linkages between risk assessment, risk management, and risk communication will be studied as components of this process, along with issues and controversies in the analysis of environmental health risks.
Prerequisite: EPI 52017 and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter