

MPH in Environmental and Occupational Health and Epidemiology

Academic Year 2014-2015 Program Profile

This curriculum provides the student the understanding, tools and skills of both epidemiology and environmental and occupational health, and apply state-of-the-art methodologies to evaluate population based environmental and occupational exposures and the associations with health outcomes, and recommend and evaluate interventions. Core and required courses establish a strong foundation to the fundamental competencies of public health, epidemiology, and Environmental and Occupational Health Sciences. The essentials of epidemiology, including research methods and design, statistical analysis and epidemiological investigation are emphasized. Environmental and Occupational Health methodologies are presented for assessment, evaluation and controls of the physical, chemical and biological stressors in the environments where people live and work. Students in this concentration take an average of two years to complete a minimum of 54 semester credit hours to earn the MPH degree.

By the conclusion of the MPH program, a student in the joint environmental and occupational health sciences and epidemiology will be able to:

MPH-EOHS 1: Identify and discuss health, safety, and ecological impacts of environmental agents.

MPH-EOHS 2: Recognize and describe factors that modify exposures to environmental hazards.

MPH-EOHS 3: Perform the processes of recognizing, evaluating, and controlling hazards.

MPH-EOHS 4: Identify and understand environmental and occupational health policies, regulations, and standards/guidelines.

MPH-EOHS 5: Develop, apply and evaluate programs in environmental and occupational health.

MPH-EPID 1: **Descriptive Epidemiology**- Describe a public health issue in terms of magnitude, person, time, place and the ecological factors and lifespan considerations.

MPH-EPID 2: **Evidence-Based Public Health**-Identify and use sources of epidemiologic data, information, knowledge and evidence as a basis for research, decision-making and evidence-based public health practice.

MPH-EPID 3: **Critical Analysis**- Interpret findings from epidemiologic studies, demonstrating understanding of design, confounding, sources of bias and causality.

MPH- EPID 4: **Analytic Epidemiology**-Demonstrate proficiency in epidemiologic study design, measurement and analysis, including the use of statistical software.

MPH-EPID 5: **Epidemiologic Communication**- Effectively communicate epidemiologic information in a linguistically and culturally appropriate manner to the general public, professionals, policy makers, across social sectors and in inter-professional communication.

MPH-EPID 6: **Ethics**-Comprehend basic principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data.

MPH Core Competencies

The Master of Public Health degree program prepares students to address the following core competencies while advancing their knowledge of public health:

Competency	Competency Description
Public Health Knowledge & Skills	The MPH student will apply basic knowledge and skills of the core public health sciences that include: biostatistics, epidemiology, health management and policy, behavioral and community health, and environmental and occupational health, to the prevention of illness and injury and the promotion of population health.
Integration of Theory and Practice	The MPH student will demonstrate the effective integration of theory and practice related to public health issues that affect diverse populations, through a thesis or comprehensive examination and a practice experience.
Communication and Informatics	The MPH student will gather, organize, and manage data and information effectively to address public health issues through oral and written communications to diverse professionals and lay audiences.
Diversity and Culture	The MPH student will demonstrate the ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.
Professionalism	The MPH student will apply ethical principles to the practice of public health in a variety of settings, demonstrating personal integrity while embracing diverse communities.

Master of Public Health: EOHS and Epidemiology Concentration Planning Form (54 Credit Hours Required)

Student		Advisor		
Email		Semester of CPH		
Mobile Phone		Semester of Comprehensive Exam		
Semester Program Began		Expected Graduation Term		
Semester Initiated Practice Experience		Completed Practice Experience Requirements		
Practice Site		Practice Supervisor		
Fall _____		SCH	Term	Grade (or AP)
BIOS 5300	Biostatistics for Public Health 1	3		
EPID 5300	Principles of Epidemiology	3		
EOHS 5300	Environmental Determinants of Health	3		
EPID 5313	Introduction to Data Management and Statistical Computing	3		
PHED 5197	Professional and Academic Development	0.5		
Spring _____		12.5		
BIOS 5310	Intermediate Biostatistics	3		
EOHS 5350	Environmental & Occupational Toxicology	3		
EOHS 5330	Recognition, Evaluation & Control of Environmental Hazards	3		
EPID 5310	Intermediate Epidemiology	3		
PHED 5197	Professional and Academic Development	0.5		
Summer _____		12.5		
BACH 5300	Theoretical Foundations of Individual and Community Health	3		
HMAP 5300	Introduction to Health Management and Policy	3		
Fall _____		6		
EPID 5312	Survey Research & Questionnaire Design	3		
EOHS 5310	Evaluation & Control of Biologic Agents & Infectious Disease	3		
EOHS 5331	EOHS Sampling and Analytic Methods	3		
EOHS/EPID ____*	Elective _____	3		
PHED 5197	Professional and Academic Development	0.5		
PHED 5000	Certified in Public Health (CPH) Exam	0		
Spring _____		12.5		
EPID _____	Elective (Infectious – F, or Chronic Disease – S)	3		
EOHS _____	Elective	3		
EOHS/EPID ____*	Elective	3		
EOHS/EPID 5297	Public Health Practice Experience	1.5		
EOHS 5001	MPH Comprehensive Exam (EOHS)	0		
EPID 5001	MPH Comprehensive Exam (Epidemiology)	0		
		10.5		
	Total Degree Hours	54.0		

Reviewed and agreed on this date _____

SPH Advisor _____

Student _____

Approved Electives:

*EPID Electives	*EOHS Electives
EPID 6318 Surveillance EPID 5320 Infectious Disease Epidemiology EPID 5318 Chronic Disease Epidemiology EPID 5391 Topics: Maternal Child Health Epidemiology, Molecular Epidemiology, Cancer Epidemiology **EPID 5391 Topics: Biological Basis for Public Health	EOHS 5312 Food Quality and Safety (SS) EOHS 5316 Animals and Public Health Implications (SS) EOHS 5318 Animals and Humans and the Diseases They Share (Sp) EOHS 5322 Air Pollution and Health (F) EOHS 5324 Water and Public Health (Sp) EOHS 6300 Environmental Determinants of Health II (F) EOHS 6340 Risk Assessment (Sp)