

Graduate Certificate in Core Public Health Concepts
Core Competencies and Course Alignment Matrix

Core Competencies (See key below for course titles)	MPH 754 OR MPH 708 & MPH 854	MPH 806	MPH 720	MPH 818	MPH 701	MPH 840 Field Exp
Biostatistics: Apply descriptive and inferential methodologies for testing specific public health or research hypotheses according to the type of study design and measurement scale.					P	R
Biostatistics: Apply basic informatics techniques in the acquisition of public health data and in the analysis of survey and experiential designs.					P	R
Environmental Health: Describe genetic and physiological factors that affect health outcomes following exposure to environmental hazards.		P				R
Environmental Health: Explain the general mechanisms of toxicity in eliciting an adverse response to various environmental exposures.		P				R
Environmental Health: Describe current environmental risk assessment methods, and be able to specify approaches for assessing, preventing, and controlling environmental hazards that pose risks to human health and safety.		P				R
Epidemiology: Properly calculate and use measures of disease, injuries, and death in human populations (e.g., prevalence, incidence, relative risk, attributable risk, population attributable risk, etc.) to describe problem magnitude; and to investigate associations to such consideration as age, gender/sex, race, occupation, social characteristics, diet, and environment.	P					R
Epidemiology: Draw appropriate inferences from epidemiologic data, and identify the data's strengths and limitations.	P					R
Epidemiology: Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use, and dissemination of epidemiological data.	P					R
Health Services Administration: Recognize how the roles and interaction between various stakeholders in the healthcare system (including health care providers, other members of the healthcare workforce, consumers of healthcare, etc.) impact the accessibility of healthcare.			P			R
Health Services Administration: Describe the demographic trends which impact healthcare, and in turn, public health in the United States.			P			R
Social and Behavioral Sciences: Identify basic theories, concepts, and models from a range of social and behavioral disciplines that are used in public health intervention and policies.				P		R
Social and Behavioral Sciences: Identify the causes of social and behavioral factors that affect the health of individuals and populations with specific emphasis on underserved populations.				P		R

P=Primary Course; R=Reinforcing Course

Key to Course Titles

MPH Core Course List			
Course #	Course Title	Course #	Course Title
MPH 708	Veterinary Epidemiology	MPH 720	Administration of Health Care Organizations
MPH 754	Introduction to Epidemiology	MPH 818	Social and Behavioral Bases of Public Health
MPH 806	Environmental Toxicology	MPH 701	Fundamentals and Methods of Biostatistics
MPH 854	Intermediate Epidemiology	MPH 840	Public Health Field Experience