Major Competencies for the MPH Degree

Click below to jump to the list specific to your major.

- Biostatistics
- Community Health Practice
- Dietetic Internship Program
- Environmental Health
- Epidemiology
- Health Promotion/Health Education
- Healthcare Management
- Health Services Organizations

**Biostatistics**

MPH-B1: Apply appropriate statistical regression models to public health data.

MPH-B2: Demonstrate basic statistical inferences for public health datasets.

MPH-B3: Use multiple statistical software packages appropriately to analyze public health data.

MPH-B4: Describe preferred methodological alternatives to commonly used statistical methods when their assumptions are not met.

MPH-B5: Manage data sets appropriately for public health research related analyses.

MPH-B6: Identify and implement the dimensions of reproducibility in public health research from a biostatistics perspective.

**Community Health Practice**

MPH-C1: Apply Community Health Practice methods such as program planning, implementation, or evaluation, to public health problems to address community partner needs.

MPH-C2: Analyze the role of governmental public health and non-profits in the public health system.

MPH-C3: Examine implicit bias and the role of discrimination on health.

MPH-C4: Examine the role of leadership in public health practice.

MPH-C5: Investigate a community partner’s needs and execute a project aligned with those needs.
Environmental Health

MPH-O1: Conduct a risk characterization of an environmental hazard.

MPH-O2: Critically evaluate information and data in the peer-reviewed literature related to environmental health sciences, considering the quality and suitability of literature and data.

MPH-O3: Describe regulatory programs, including effectiveness, in the context of legislative authorities that deal with environmental health issues at the local, state, federal, or international levels.

MPH-O4: Describe the function, structure and financing of environmental programs.

MPH-O5: Explain approaches to risk management, communicating risk issues effectively.

Epidemiology

MPH-E1: Analyze key sources of data for epidemiological purposes.

MPH-E2: Demonstrate the application of epidemiology for informing etiologic research, public health surveillance, screening programs.

MPH-E3: Evaluate a public health problem in terms of magnitude, person, place and time, and exposure-outcome relationships.

MPH-E4: Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health issues.

MPH-E5: Apply basic ethical principles pertaining to the collection, maintenance, use and dissemination of epidemiologic information.

MPH-E6: Apply data analysis techniques to basic epidemiologic data, including calculating and appropriately interpreting measure of disease frequency and association.

Health Promotion/Health Education

MPH-H1: Assess needs and assets in partnership with stakeholders, in the context of environmental, behavioral and biological determinants that influence health.

MPH-H2: Apply evidence, theories and models from social and behavioral sciences to understand determinants of health at multiple levels of the socio-ecological model.

MPH-H3: Recognizing the role of stakeholder involvement, develop theory- and evidence-based programs, practices or policies to promote health at multiple levels of the socio-ecological model.

MPH-H4: Plan for adoption, implementation, maintenance of health promoting programs, practices or policies.

MPH-H5: Develop a plan to monitor and evaluate the implementation of a health promotion program, including coverage and delivery.

MPH-H6: Develop a plan to evaluate impact of a health promotion program on appropriate program-specific outcomes.

MPH-H7: Describe various professional health promotion career and credentialing opportunities.
Health Promotion/Health Education, Dietetic Internship Program

MPH-D1: Use evidence and health promotion/behavioral science theory to develop nutrition focused public health interventions.

MPH-D2: Demonstrate the ability to assess the needs of groups or populations related to nutrition.

MPH-D3: Communicate patient or client cases using professional nutrition standards.

MPH-D4: Demonstrate the ability to conduct nutrition-focused physical assessments.

MPH-D5: Implement evidence and theory based nutrition interventions.

Healthcare Management

MPH-M1: Team Leadership: The student effectively collaborates with others and leads teams within and across healthcare organizations and communities, adapting when needed to maximize organizational and personal success.

MPH-M2: Strategic Orientation: The student synthesizes the opportunities and challenges an organization faces and communicates appropriate vision and strategies for organizational success.

MPH-M3: Analytical Thinking: The student evaluates quality, safety and financial performance measures and applies analysis to support managerial decision making in health organizations and/or services.

MPH-M4: Ethics & Professionalism: The student synthesizes knowledge and skills to excel professionally, acts according to high ethical standards and influences others in order to make a meaningful contribution to the field.

MPH-M5: Organizational Management: The student selects, integrates and evaluates organizational resources to provide high-quality customer-oriented health services that are responsive to innovations in healthcare and the ever-changing political landscape.

Health Services Organization

MPH-S1: Identify the main component and issues of the organization, financing and delivery of health services and public health systems in the US.

MPH-S2: Critically Review: Review and critically evaluate scientific studies that estimate the effectiveness, efficiency, and equity of health policy alternatives.

MPH-S3: Design Evaluations: Prepare a detailed policy analysis plan to assess alternative policies for improving the effectiveness, efficiency and equity of health services.

MPH-S4: Describe Strengths & Limitations: Describe the internal and external validity strengths and limitations of health policy evaluations and the degree to which results are useful to decision-makers.

MPH-S5: Communicate: Communicate orally and in writing the pros and cons of health policy alternatives that address the effectiveness, efficiency, and equity aspects of public health or medical care at the institutional and higher levels.