

Program Goals and Objectives

- **Education:** To ensure the highest quality education to prepare professionals to address public health issues.
 1. Knowledge of the major aspects of public health including definitions, theory, history, and practice in public health.
 2. Knowledge of the environmental factors and their relation with human health including: water pollution, air pollution, environmental toxicology, food contamination, occupational safety and health, solid waste issues and ionizing and non-ionizing radiation.
 3. Knowledge of the social, behavioral and psychological factors related with disease occurrence among diverse populations.
 4. Knowledge of the health policies in Puerto Rico as well in the United States including: access to health services, health insurances, state and federal regulations related with health services, the Puerto Rico health system, the role of institutions and government on the development and implementation of public health policy, methods of policy analysis and legal bases of public health.
 5. Knowledge of the major ethical and legal concepts and their impact on public health policy and practice. Emphasis will be given to justice and equity as important concepts in public health practice.
 6. Knowledge of the framework and theories of health management administration applied to the health field.
 7. Knowledge of the basic concepts of strategic planning in the context of health care and community based organizations.
 8. Knowledge of the concepts related with health evaluation and the implementation interventions programs in community settings.
 9. Knowledge of the aspects of health education and health promotion programs for successful strategies for disease prevention.
 10. Knowledge of the scientific evidence and data for policies and programs in public health.
 11. Knowledge of the public health issues related with the urban environments including: urban population growth, housing issues, healthy cities and the built natural and socioeconomics environments and its relation with health and disease.
 12. Knowledge of the basic principles of public health informatics understood as the systematic application of information and computer science and technology to public health practice, research, and learning.
 13. Knowledge of basic and advance statistical analysis for the application into the public health field.
 14. Knowledge of the main concepts of the epidemiologic principles for the study of occurrence of diseases including: the design of epidemiologic studies, descriptive and analytical epidemiology, principles of causality, hypothesis formulation and the scientific method, and surveillance programs.
- **Research:** To conduct evidence-based research to identify and address issues in order to advance knowledge and community practice in the public health field.

15. Provide scientific research experience and its application to understand the public health issues that affect vulnerable communities.
16. Development of a research proposal applying the basic concepts and techniques of the scientific method.
17. Implementation of a research proposal methodology including the data collection, data entry and data analysis will be required.
18. Presentation of the written and oral results, conclusions and public health recommendations related to research projects findings.
- **Service:** To advance the health of underserved communities through collaborative public health approaches.
19. Participate in community based initiatives to integrate public health concepts.
20. Integrate and apply knowledge and skills to a practical setting to strengthen public health competencies and work with a community-based setting.

SJB



FOUNDATIONAL PUBLIC HEALTH KNOWLEDGE LEARNING OBJECTIVES

The 12 Council on Education for Public Health (CEPH) Foundational Public Health Knowledge Learning Objectives are met in a two credit course offered during the first trimester of the first year (**MPH 3101 Fundamentals in Public Health**).

Profession & Science of Public Health

1. Explain public health history, philosophy and values
2. Identify the core functions of public health and the 10 Essential Services
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge

Factors Related to Human Health

7. Explain effects of environmental factors on a population's health
8. Explain biological and genetic factors that affect a population's health
9. Explain behavioral and psychological factors that affect a population's health
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
11. Explain how globalization affects global burdens of disease
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health

MPH PROGRAM COMPETENCIES

The 22 Council on Education for Public Health (CEPH) Foundational Competencies are covered throughout the curriculum courses and applied practice experience.

Evidence-based Approaches to Public Health

1. Apply epidemiological methods to the breadth of settings and situations in public health practice
2. Select quantitative and qualitative data collection methods appropriate for a given public health context
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
4. Interpret results of data analysis for public health research, policy or practice

Public Health & Health Care Systems

5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

Planning & Management to Promote Health

7. Assess population needs, assets and capacities that affect communities' health
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
9. Design a population-based policy, program, project or intervention
10. Explain basic principles and tools of budget and resource management
11. Select methods to evaluate public health programs

Policy in Public Health

12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations
15. Evaluate policies for their impact on public health and health equity

Leadership

16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making
17. Apply negotiation and mediation skills to address organizational or community challenges

Communication

18. Select communication strategies for different audiences and sectors
19. Communicate audience-appropriate public health content, both in writing and through oral presentation
20. Describe the importance of cultural competence in communicating public health content

Interprofessional Practice

21. Perform effectively on interprofessional teams

Systems Thinking

22. Apply systems thinking tools to a public health issue

