FOUNDATIONAL COMPETENCIES

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 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 of practice

Public Health & Health Care Systems

5	Compare the organization, structure and function of health care and public health 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 the at organizational, community and societal levels

Program 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 programs
9	Design a population-based project, program, policy, or intervention
10	Explain basic principles and tools of budget and resource management
11	Select methods to evaluate public health programs or policies

Policy in Public Health

12	Discuss multiple dimensions of the policy- making process, including the role 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

Communication

17	Apply negotiation and mediation skills to address organization or community challenges
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 competency in communicating public health content
21	Perform effectively on interprofessional* teams * Interprofessional education occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes." From: Framework for Action on Interprofessional Education & Collaboration Practice (WHO/HRH/HPM/10.3).

Systems Thinking

22	Apply systems thinking tools to a public health issue

PROGRAM-SPECIFIC COMPETENCIES

Health Data Science MPH

1	Apply statistical theory to understand the uses and limitations of analysis methods.
2	Apply appropriate coding practices, and use at least one statistical programming language to wrangle, visualize, and analyze data, and to present (using tables, figures, etc.) analysis results.
3	Select and carry out data analysis methods commonly used in biostatistical practice, including exploratory data analysis, descriptive statistics, estimation (point and interval), hypothesis testing, methods for independent or correlated data, for continuous or categorical outcomes, and for censored data, and non-parametric and resampling/re-randomization methods.
4	Collaborate in the design, conduct, and analysis of research studies as part of an interdisciplinary research team.
5	Interpret the results of data analyses and communicate them to non-statisticians.

Community Health Promotion (CHP) MPH

Area 1	
1	Apply theories to the development of effective public health programs and policies.
2	Create effective theory-based conceptual models to guide intervention development.
3	Ground proposals in prior work by critically reviewing the existing research literature to identify individual and environmental-level factors that can be changed to address significant public health issues
4	Critically assess existing interventions, evaluations, and/or public health organizations
5	Develop implementation plans for public health interventions, including timelines, budgets, and resource requirements
6	Develop intervention materials to use for public health programs and policies
7	Plan engagement and how to use ongoing feedback from targeted communities and other stakeholders during intervention development and implementation

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8	Develop logic models as part of intervention development and/or evaluations of public health interventions
9	Develop effective grant proposals to apply for funding to support public health interventions and/or evaluations
	Area 2
1	Plan engagement and how to use ongoing feedback from targeted communities and other stakeholders during evaluation, development and implementation
2	Develop and critique appropriate content and tools for assessment in formative, process, and outcome evaluations
3	Conduct data analyses to determine intervention needs and evaluate effects
4	Develop evaluation protocols and data collection plans

Environmental Health (EH) MPH

1	Evaluate hazards in various environments
2	Analyze factors that influence the presence and magnitude of hazards
3	Identify pathways of exposure to environmental hazards
4	Integrate exposure and health effects knowledge to investigate health risk and inequity
5	Propose risk management strategies, such as education, policy, and technology, directed toward environmental health stakeholders, including government, industry, and community groups

Epidemiology (EPI) MPH

1	Develop epidemiologic research questions and formulate testable hypotheses that are grounded in the published public health literature and informed by an understanding of pathophysiology and public health impact
2	Using data from public databases or other data sources, rigorously analyze the distribution of public health-relevant exposures and outcomes to characterize them by person, place, and time.
3	Develop and implement data management and analysis plans that use statistical procedures which are appropriate for the epidemiologic study design that is being employed

4	Assess effect modification as well as potential sources of confounding and bias in epidemiologic study data and reports in order to draw appropriate conclusions
5	Interpret epidemiologic research findings to determine the implications for disease prevention and control.
6	Prepare written, oral, and/or visual reports that communicate complex epidemiologic information or concepts to lay and professional audiences, including other epidemiologists

Maternal and Child Health (MCH) MPH

1	Appraise & prioritize important health issues for specific MCH populations, including place, race, and status disparities in health and wellness
2	Analyze the role of social determinants of health & how they contribute to health disparities in women, infants, children, adolescents, and/or pregnant & parenting families
3	Analyze & select appropriate evidence-based guidelines for newborn, child, adolescent, maternal, paternal reproductive, and women's health, including Title V programs
4	Integrate elements of the life course health development framework in programs and policies
5	Apply family-centered philosophical constructs to critique practices, programs, or policies that affect MCH population groups, including children and youth with special health care needs (CYSHCN)
6	Formulate an important MCH practice, research or policy question based on scientific literature to present a rationale for MCH policies and programs
7	Develop, edit, or use surveys, questionnaires, indicators, or other qualitative or quantitative tools to help assess MCH population needs or evaluate the effectiveness of an existing program for specific MCH population groups
8	Develop a grant proposal targeted to federal, state, local or philanthropic grant sources to support MCH interventions, programs or research
9	Analyze ethical issues faced by MCH populations in different settings, including clinical care, community-based settings, research, or public health practice
10	Develop communication tools for programs and policies for diverse audiences
11	Conduct an environmental scan or other community needs assessment to identify systems, stakeholders, programs, practices or other features that impact the health of MCH populations in a given location
12	Identify and analyze factors that facilitate implementation of evidence-based programs in MCH or otherwise assist in MCH program implementation

Public Health Administration & Policy (PHAP) MPH and

Executive Public Health Administration & Policy (E-PHAP) MPH

1	Apply an understanding of the principles of healthcare delivery systems to current public health policy and administration
2	Develop management and leadership skills for public and population health care programs, organizations, and systems
3	Apply high quality, scientifically rigorous research to address problems in public health policy and administration
4	Develop and analyze public health policy
5	Analyze and dismantle organizational policies & practices that perpetuate racism & inequity

Public Health Nutrition (PHN) MPH

	Area 1: Develop, Adapt, and/or Implement Policy or Programmatic Interventions or Services that Address Significant Public Health Nutrition Issues
1	Apply theoretical and/or skill-based knowledge of nutrition science needed for PHN practice
2	Apply current, evidence based best practices for dietary, biochemical and/or anthropometric methods for assessing nutritional status
3	Utilize scientific literature effectively and efficiently by understanding how to locate, access and use reliable resources for evidence-based diet and nutrition information
4	Understand evidence-based dietary guidelines and nutrition recommendations issued to the public in the US and utilize them to develop nutrition communications and/or guide applied PHN practice.
5	Identify the components of effective nutrition messaging from a public health perspective, including how nutrition messaging strategies may vary by target population or community demographics
6	Understand the importance, value and limitations of using an evidence-based framework in public health nutrition practice
7	Evaluate how social determinants of health affect the nutritional status of individuals and/or populations, including their contribution to disparities in nutrition-relevant health outcomes.
8	Design and implement a needs assessment to inform the development of a nutrition or physical activity program or policy, systems or environmental intervention
9	Develop theory-informed goals, objectives, and implementation plans for the design of a nutrition or physical activity program or policy, systems or environmental intervention.

10	Prepare a budget for the development and evaluation of a nutrition or physical activity intervention
11	Analyze nutrition policy, advocacy and/or other similar initiatives, including analysis of engagement strategies for different stakeholder groups
12	Analyze how policy, systems changes and environmental changes affect the health and/or nutritional status of populations.
	Area 2: Develop and/or Implement a Needs Assessment or Evaluation of Policy or Programmatic Interventions or Services that Address Significant Public Health Nutrition Issues
1	Apply theoretical and/or skill-based knowledge of nutrition science needed for PHN practice
2	Apply current, evidence based best practices for dietary, biochemical and/or anthropometric methods for assessing nutritional status
3	Utilize scientific literature effectively and efficiently by understanding how to locate, access and use reliable resources for evidence-based diet and nutrition information
4	Understand evidence-based dietary guidelines and nutrition recommendations issued to the public in the US and utilize them to develop nutrition communications and/or guide applied PHN practice
5	Identify the components of effective nutrition messaging from a public health perspective, including how nutrition messaging strategies may vary by target population or community demographics

Public Health Practice (PHP) MPH

	Students enrolled in the Public Health Practice program are pursuing a dual degree; an MPH and one of the following: 1. Doctor of Nurse Practice 2. Doctor of Veterinary Medicine 3. Doctor Pharmacy 4. Doctoral in Dental Surgery 5. Executive Program in Public Health Practice 6. Juris Doctor 7. Master of Public Policy 8. Master of Urban and Regional Planning 9. Public Health Medicine
1	Identify the rationale and key steps for policy development: assessment, planning, implementing, advocacy and evaluation
2	Develop skills in systemic thinking and understand how systems are connected and interdependent, and understand the potential consequences that systems may have on communities

3	Explain the effects of policies, programs, community-based interventions that promote improving health for different populations in communities
4	Demonstrate how to turn data into information and action to influence public health policies and programs
5	Demonstrate how data and information is developed and conveyed to different audiences (professionals and the public) using a variety of media approaches.

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