

MPH Competencies and Course Matrices

By receiving a Master of Public Health (MPH) degree from the NDSU, students will be expected to attain the following public health competencies in addition to those specific to their specialization.

	Foundational Competencies (see key below for course titled)	PH 704	PH 706	PH 712	PH 720	PH 731	PH 741	PH 751
1	Apply epidemiological methods to the breadth of settings and situations in public health practice		х					
2	Select quantitative and qualitative data collection methods appropriate for a given public health context		х	Х				
3	Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate			х		х		
4	Interpret results of data analysis for public health research, policy or practice		х	х		х		
5	Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings	х						
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			Х			х	
7	Assess population health needs, assets and capacities that affect communities' health						х	
8	Apply awareness of cultural values and practices to the design or implementation of public health policies or programs						X	х
9	Design a population-based policy, program, project or intervention				х		х	
10	Explain basic principles and tools of budget and resource management							х

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11	Select methods to evaluate public health programs	х					х	
12	Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence	х						
13	Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes						х	х
14	Advocate for political, social or economic policies and programs that will improve health in diverse populations	х						
15	Evaluate policies for their impact on public health and health equity	х			х			
16	Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making	Х						х
17	Apply negotiation and mediation skills to address organization or community challenges							Х
18	Select communication strategies for different audiences and sectors			Х				Х
19	Communicate audience-appropriate public health content, both in writing and through oral presentation	Х		X	Х			
20	Describe the importance of cultural competence in communicating public health content				Х		Х	Х
21	Perform effectively on interprofessional teams							Х
22	Apply systems thinking tools to a public health issue	X			х			

Key for Course Titles

PH 704	Health Management and Policy
PH 706	Essentials in Epidemiology
PH 712	Public Health Research Methods
PH 720	Environmental Health for Public Health Professionals
PH 731	Biostatistics
PH 741	Social and Behavioral Sciences in Public Health
PH 745	Community Health Leadership