

**East Carolina University
Department of Public Health**

***Master of Public Health
Competencies***



ECU Master of Public Health (MPH)

- The Master of Public Health (MPH) degree is accredited by the Council on Education in Public Health (CEPH)
- Courses in the MPH program are designed to meet the criteria established by CEPH to provide appropriate public health training for its graduates



ECU Master of Public Health (MPH)

- CEPH foundational knowledge and competencies can be found at the following website:

https://storage.googleapis.com/media.ceph.org/wp_assets/2016.Criteria.pdf



Council *on* Education *for* Public Health



MPH Foundational Knowledge

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

MPH Foundational 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 (e.g., One Health)

MPH 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 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

MPH Foundational Competencies

Competency – Evidence Based Approaches to Public Health	MPH Course
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	MPH 6011 – Introduction to Epidemiology
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	Concentration specific Research Methods (MPH 6027 – Applied Mixed Methods [CHHB], MPH 6020 [HPAL], MPH 6702 – Epidemiologic Methods [Epidemiology])
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	BIOS 7201 - Biostatistics for Health Professionals I; Concentration specific Research Methods (MPH 6027 – Applied Mixed Methods [CHHB], MPH 6020 [HPAL], MPH 6702 – Epidemiologic Methods [Epidemiology])
4. Interpret results of data analysis for public health research, policy or practice	MPH 6011 – Introduction to Epidemiology

MPH Foundational Competencies

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



MPH Foundational Competencies

Competency – Public Health and Health Care Systems	MPH Course
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings	MPH 6000 – Public Health Practice
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	MPH 6000 – Public Health Practice MPH 6035 – Interdisciplinary Rural Health



MPH Foundational Competencies

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

MPH Foundational Competency

Competency – Planning and Management to Promote Health	MPH Course
7. Assess population needs, assets and capacities that affect communities' health	MPH 6000 - Public Health Practice; MPH 6035 - Interdisciplinary Rural Public Health; MPH 6013 - Behavioral Sciences and Health Education
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs	MPH 6013 - Behavioral Sciences and Health Education
9. Design a population-based policy, program, project or intervention	MPH 6010 - Fundamentals of Environmental Health; MPH 6011 - Introduction to Epidemiology; MPH 6013 - Behavioral Sciences and Health Behavior
10. Explain basic principles and tools of budget and resource management	MPH 6000 - Public Health Practice
11. Select methods to evaluate public health programs	MPH 6000 – Public Health Practice; MPH 6011 - Introduction to Epidemiology; MPH 6013 - Behavioral Sciences and Health Education

MPH Foundational Competencies

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

MPH Foundational Competency

Competency – Policy in Public Health	MPH Course
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence	MPH 6002 - Ethics and Law in Public Health; MPH 6011 - Introduction to Epidemiology;
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	MPH 6035 - Interdisciplinary Rural Public Health
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations	MPH 6000 - Public Health Practice; MPH 6035 - Interdisciplinary Rural Public Health
15. Evaluate policies for their impact on public health and health equity	MPH 6035 - Interdisciplinary Rural Public Health; MPH 6010 - Fundamentals of Environmental Health; MPH 6013 - Behavioral Sciences and Health Education

MPH Foundational Competencies

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



MPH Foundational Competencies

Competency – Leadership	MPH Course
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making	MPH 6000 - Public Health Practice;
17. Apply negotiation and mediation skills to address organizational or community challenges	MPH 6000 - Public Health Practice



MPH Foundational Competencies

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



MPH Foundational Competencies

Competency - Communication	MPH Course
18. Select communication strategies for different audiences and sectors	MPH 6000 – Public Health Practice
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	MPH 6013 - Behavioral Sciences and Health Education
20. Describe the importance of cultural competence in communicating public health content	MPH 6013 - Behavioral Sciences and Health Education



MPH Foundational Competencies

Interprofessional Practice

21. Perform effectively on interprofessional teams

Systems Thinking

22. Apply systems thinking tools to a public health issue



MPH Foundational Competencies

Competency – Interprofessional Practice and Systems Thinking	MPH Course
21. Perform effectively on interprofessional teams	MPH 6013 - Behavioral Sciences and Health Education
22. Apply systems thinking tools to a public health issue	MPH 6000 - Public Health Practice



MPH Concentration Competencies

- In addition to the CEPH foundational competencies, each MPH concentration has competencies developed by the faculty to guide the public health professional development of our students
- Your course syllabi will contain the foundational and concentration competencies that will be covered in that course

MPH Concentration Competencies – Health Policy, Administration and Leadership

- Address inequities in the prevalence of chronic diseases in rural and minority populations using systems thinking approaches
- Examine and interpret the impact of health care costs, access, and quality policies on disadvantaged populations
- Cultivate leadership skills in strategic planning/management with a focus on reducing disparities in disadvantaged populations
- Perform financial analyses
- Develop and apply human resources management skills inclusive of diversity and disadvantaged populations

MPH Concentration Competencies - HPAL

Competency	HPAL Course
1. Address inequities in the prevalence of chronic diseases in rural and minority populations using system thinking approach	MPH 6800 - Health Policy and Politics; MPH 6810 - Strategic and Financial Management of Healthcare Organization
2. Examine and interpret the impact of health cost, access, and quality policies on disadvantaged populations	MPH 6800 - Health Policy and Politics
3. Cultivate leadership skills in strategic planning/management with a focus on reducing disparities in disadvantaged populations	MPH 6810 - Strategic and Financial Management of Healthcare Organizations
4. Perform financial analysis	MPH 6810 - Strategic and Financial Management of Healthcare Organizations
5. Develop and apply human resources management skills inclusive of diversity and disadvantaged populations	MPH 7010 - Human Resource Management and Leadership for Health Administration

MPH Concentration Competencies – Community Health and Health Behavior

- Design a logic model to guide intervention development and data collection for program evaluation.
- Develop an evaluation plan for health promotion and disease prevention interventions that address the multiple levels of socioecological framework.
- Apply qualitative and quantitative data analyses to assess programming needs, evaluation, or public health issues.
- Formulate a collaborative evaluation plan with a community partner to achieve common public health goals.
- Design a public health project that includes a detailed itemized budget, timeline, and staff training plan for data collection.

MPH Concentration Competencies – CHHB

Competency	CHHB Course
1. Design a logic model to guide intervention development and data collection for program evaluation	MPH 6605 – Evaluating Public Health Programs
2. Develop an evaluation plan for health promotion and disease prevention interventions that address the multiple levels of socioecological framework	MPH 6605 - Evaluating Public Health Programs
3. Apply qualitative and quantitative data analyses to assess programming needs, evaluation, or public health issues	MPH 6605 – Evaluating Public Health Programs
4. Formulate a collaborative evaluation plan with a community partner to achieve common public health goals	MPH 6605 - Evaluating Public Health Programs
5. Design a public health project that includes a detailed itemized budget, timeline, and staff training plan for data collection	MPH 6600 - Planning Public Health Programs

MPH Concentration Competencies - Epidemiology

- Critically evaluate public health literature through application of fundamental principles and methods of epidemiology.
- Identify and implement appropriate study design, recruitment, data collection and analysis methods to address an identified public health problem.
- Identify and apply statistical methods to calculate appropriate epidemiologic measures of association, including confounders and effect modifiers and their use in multivariable analyses.
- Perform data management, analysis, visualization, and report generation of existing public health data using SAS to inform public health decisions
- Explain epidemiologic results in terms of magnitude, precision, validity, and limitations and identify their relevance to public health guidance.

MPH Concentration Competencies - Epidemiology

Competency	Epidemiology Course
1. Critically evaluate public health literature through application of fundamental principles and methods of epidemiology.	MPH 6702 – Epidemiology Methods
2. Identify and implement appropriate study design, recruitment, data collection and analysis methods to address an identified public health problem.	MPH 6702 - Epidemiology Methods
3. Identify and apply statistical methods to calculate appropriate epidemiologic measures of association, including confounders and effect modifiers and their use in multivariable analyses.	BIOS 7022 – Biostatistics for Health Professionals II
4. Perform data management, analysis, visualization, and report generation of existing public health data using SAS to inform public health decisions	MPH 7202, Intro to PH Data Analysis – SAS
5. Explain epidemiologic results in terms of magnitude, precision, validity, and limitations and identify their relevance to public health guidance.	MPH 6702 - Epidemiology Methods