

PhD Core Competencies

Revised 08/07/2025

PHD1 Design independent, rigorous research that generates new knowledge

PHD2 Apply biostatistical methods and models to solve public health problems

PHD3 Develop evaluation strategies for health policy affecting healthcare organizations or systems

PHD4 Apply the core principles and methods of community-based participatory research

PHD5 Apply appropriate epidemiologic methods in the evaluation of public health problems

PHD6 Design effective program evaluations for interventions

PhD Concentration Competencies

Revised 08/18/2025

Environmental and Global Health

PHDEGH1 Formulate research questions and priorities based on identified environmental or global health challenges

PHDEGH2 Develop evidence-based recommendations to improve environmental or global health

PHDEGH3 Critically synthesize environmental or global health literature

PHDEGH4 Apply ethical principles to all phases of research data

Epidemiology and Biostatistics

PHDEAB1 Apply appropriate statistical methods according to study design

PHDEAB2 Evaluate the strengths and limitations of statistical analyses

PHDEAB3 Demonstrate depth of knowledge in an area of specialization related to epidemiology

Health Service Management and Policy

PHDHSMP1 Apply multivariate research techniques to data analysis

PHDHSMP2 Analyze and apply economic theory to policy making and research

PHDHSMP3 Develop theoretical constructs and models for health services research

PHDHSMP4 Evaluate contemporary healthcare payment systems

PHDHSMP5 Demonstrate the skills necessary for conducting secondary data analysis

Social and Behavioral Health

PHDSBH1 Apply behavioral theory to solve problems within public health

PHDSBH2 Propose appropriate program plans that facilitate behavior change

PHDSBH3 Plan program evaluations for interventions designed to produce health status changes

PHDSBH4 Engage in interdisciplinary groups to address problems within public health

MPH Core Competencies

Revised 08/07/2025

Evidence-Based Approaches to Public Health

MPH1 Apply epidemiological methods to settings and situations in public health practice

MPH2 Select quantitative and qualitative data collection methods appropriate for a given public health context

MPH3 Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate

MPH4 Interpret results of data analysis for public health research, policy, or practice

Public Health & Health Care Systems

MPH5 Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings

MPH6 Discuss the means by which structural bias, social inequities, and racism undermine health and create challenges to achieving health equity at organizational, community, and systemic levels

Planning & Management to Promote Health

MPH7 Assess population needs, assets, and capacities that affect communities' health

MPH8 Apply awareness of cultural values and practices to the design, implementation, or critique of public health policies or programs

MPH9 Design a population-based policy, program, project, or intervention

MPH10 Explain basic principles and tools of budget and resource management

MPH11 Select methods to evaluate public health programs

Policy in Public Health

MPH12 Discuss the policy-making process, including the roles of ethics and evidence

MPH13 Propose strategies to identify relevant communities and individuals and build coalitions and partnerships for influencing public health outcomes

MPH14 Advocate for political, social, or economic policies and programs that will improve health in diverse populations

MPH15 Evaluate policies for their impact on public health and health equity

Leadership

MPH16 Apply leadership and/or management principles to address a relevant issue

MPH17 Apply negotiation and mediation skills to address organizational or community challenges

Communication

MPH18 Select communication strategies for different audiences and sectors

MPH19 Communicate audience-appropriate public health content, both in writing and through oral presentation to a non-academic, non-peer audience with attention to factors such as literacy and health literacy

MPH20 Describe the importance of cultural humility in communicating public health content

Interprofessional and/or Intersectoral Practice

MPH21 Integrate perspectives from other sectors and/or professions to promote and advance population health

Systems Thinking

MPH22 Apply a systems thinking tool to visually represent a public health issue in a format other than standard narrative

Please note: Competencies in red (MPH6, MPH13, MPH16, MPH19, MPH21, MPH22) have been revised.

MPH Concentration Competencies

Revised 08/07/2025

Environmental and Global Health

- MPHEGH1 Describe the biological, chemical, or physical hazards that impact the health of human populations and their surrounding ecosystems
- MPHEGH2 Identify prevention and mitigation strategies for environmental hazards
- MPHEGH3 Perform complex literature searches in environmental or global health that aggregate results from multiple sources
- MPHEGH4 Discuss systems, processes, laws, or policies at the governmental or institutional levels that impact health outcomes
- MPHEGH5 Explain sampling and analysis methods for environmental hazards
- MPHEGH6 Design a research study to examine health hazards that impact human populations and their environment

Epidemiology and Biostatistics

- MPHEAB1 Critically evaluate epidemiological research findings
- MPHEAB2 Critically analyze applied linear regression models in public health research
- MPHEAB3 Analyze ethical considerations present during study design
- MPHEAB4 Apply ethical and legal principles pertaining to epidemiological practice
- MPHEAB5 Evaluate community health problems through analysis of public health data

Generalist

- MPHGEN1 Analyze the applicability of social and behavioral health theories
- MPHGEN2 Analyze epidemiological strategies for understanding social determinants of health
- MPHGEN3 Examine racial and ethnic health disparities in Nevada
- MPHGEN4 Explain the application of law in public health
- MPHGEN5 Design a social and behavioral change intervention using a logic model

Healthcare Administration and Policy

- MPHHCA1 Perform an environmental analysis
- MPHHCA2 Apply performance improvement concepts to address organizational performance issues
- MPHHCA3 Perform financial data analysis
- MPHHCA4 Apply organizational theory to healthcare organizations
- MPHHCA5 Demonstrate the skill sets necessary for conducting secondary data analysis.

Social and Behavioral Health

- MPHSBH1 Apply psychosocial and behavioral theory as a basis for health education
- MPHSBH2 Analyze targeted priority population selection in the health promotion evaluation process
- MPHSBH3 Explain the links between social determinants of health and health outcomes
- MPHSBH4 Describe the socio-political dynamics that can promote health equity
- MPHSBH5 Explain the utilization of evidence-based strategies for improving health equity

EMHA Competencies

Effective 08/01/2021

Extensive Knowledge of Healthcare Environment

- EMHA A1 Healthcare Issues and Trends (Demonstrate a broad knowledge of the healthcare industry and trends involved in provision, coverage, and access to care)
- EMHA A2 Standards and Regulations (Identify standards, laws, regulatory and accreditation criteria applicable to healthcare organizations)
- EMHA A3 Population Health (Identify basic theory, concepts and models of health promotion, disease causation and prevention; analyze trends using primary and/or secondary community and health status data)
- EMHA A4 Healthcare Payment System (Develop a strong understanding of the reimbursement process for healthcare in the United States including the private and public sector payers)

Advanced Communication and Relationship Skills

- EMHA B1 Effective Written, Oral and Presentation Skills (Be able to communicate in a clear and logical manner within both formal and informal groups of all sizes)
- EMHA B2 Interpersonal Communication and Working Effectively in Teams (Build collaborative relationships, create, participate in, and lead teams)
- EMHA B3 Prudence (Value others' perspectives in decision-making and using good judgment in the allocation of resources)

Leadership, Professionalism, and Ethics

- EMHA C1 Personal and Professional Ethics (Adhere to ethical personal and business principles; exhibit ethical behaviors; live and communicate organizational values)
- EMHA C2 Diversity, Equity, and Inclusion (Understand the importance of promoting diversity, equity, and inclusion to improve healthcare services)
- EMHA C3 Self-Assessment (Complete self-assessment each semester; evaluate course/project performance; evaluate personal and professional values; participate in continuing education and lifelong learning)
- EMHA C4 Systems Thinking (Broad systems connections - potential impacts and consequences of decisions in a wide variety of situations)
- EMHA C5 Change Management (Proactively planning, managing and implementing change)
- EMHA C6 Execution Capability (Demonstrate a strong action orientation)

Business Knowledge and Skills

- EMHA D1 Health Economics (Analysis and application of economic theory and concepts to business decisions)
- EMHA D2 Organizational Dynamics and Governance (Apply organizational theory and behavior to develop, assess, design or redesign healthcare organizations)
- EMHA D3 Problem-Solving and Decision-Making (Formulate questions and apply models to address issues and problems with stakeholder input)
- EMHA D4 Financial Management (Ability to compile and analyze financial data; develop capital, operating and cash flow budgets; analyze investment data; pro forma development)

- EMHA D5 Strategic Planning (Ability to perform environmental analysis; discern competitive strategy; formulate business and marketing strategy based on evidence; course correct in a timely way as needs dictate)
- EMHA D6 Information Management/Understanding and Using Technology Skills (Apply techniques and methods to plan, design, implement and assess information flow and communication; keep abreast of current industry technology to support business needs)
- EMHA D7 Risk Management (Assessment of risk exposure; apply methods to ensure patient, visitor and staff safety; proactive avoidance of/and timely resolution of ethical and legal issues; ability to demonstrate courage in risk taking)
- EMHA D8 Quantitative Skills (Analyze data and interpret quantitative information in decision-making process)
- EMHA D9 Healthcare Legal Principles Development, Application and Assessment (Analyze managerial issues related to the law governing healthcare; compliance; fiduciary responsibility)
- EMHA D10 Quality Improvement/Performance Improvement (Define and assess quality and performance to deliver patient centric programs with a focus on the Triple Aim)
- EMHA D11 Project Management (Able to design, plan, implement and assess projects related to performance, structure and outcomes of health services; sensitivity to broad spectrum of and communication with stakeholders)
- EMHA D12 Health Policy Formulation, Implementation and Evaluation (Identify policy issues and key stakeholders; design and evaluate policy strategies)
- EMHA D13 Workforce Development Management (Define clinical and nonclinical roles and apply methods and techniques related to the management of healthcare organization employees and professional staff)

MHA Competencies

Effective 06/08/2021

Knowledge of Healthcare Environment

- MHA A1 Healthcare Issues and Trends (Demonstrate a broad knowledge of the healthcare industry and trends involved in provision, coverage, and access to care)
- MHA A2 Standards and Regulations (Identify standards, laws, regulatory, and accreditation criteria applicable to healthcare organization)
- MHA A3 Populations' Health and Status Assessment (Identify basic theory, concepts and models of health promotion, disease causation and prevention; analyze trends using primary and/or secondary community and health status data)
- MHA A4 Healthcare Payment System (Develop a strong understanding of the reimbursement process for healthcare in the United States including the private and public sector payers)

Communication and Relationship Skills

- MHA B5 Effective Written, Oral, and Presentation Skills (Be able to communicate in a clear and logical manner within both formal and informal groups)
- MHA B6 Interpersonal Communication and Working Effectively in Teams (Build collaborative relationships, create, participate in, be accountable to, and lead teams)

Leadership, Professionalism, and Ethics

- MHA C7 Personal and Professional Ethics (Adhere to ethical personal and business principles; exhibit ethical behaviors)
- MHA C8 Diversity and Inclusion (Understand the importance of promoting diversity and inclusion to improve healthcare services)
- MHA C9 Assess Individual Strengths and Weaknesses (Evaluate personal and professional values; participate in continuing education and lifelong learning)
- MHA C10 Systems Thinking (Broad systems connections -- potential impacts and consequences of decisions in a wide variety of situations)
- MHA C11 Change Management (Promote and manage change)

Business Knowledge and Skills

- MHA D12 Health Economics (Analysis and application of economic theory and concepts to business decisions)
- MHA D13 Organizational Dynamics and Governance (Apply organizational theory and behavior to develop, assess, design or redesign healthcare organizations)
- MHA D14 Problem-Solving and Decision-Making (Formulate questions, use multiple methods and sources to seek information, apply models or tools to address issues or problems, and create solutions and/or recommendations)
- MHA D15 Financial Management (Ability to compile and analyze financial data; develop capital, operating and cash flow budgets; analyze investment data; pro forma development).
- MHA D16 Strategic Planning (Ability to perform environmental analysis; discern competitive strategy; formulate business strategy based on evidence)

- MHA D17 Information Management/Understanding and Using Technology Skills (Apply techniques and methods to plan, design, implement and assess information flow and communication)
- MHA D18 Quantitative Skills (Analyze data and interpret quantitative information)
- MHA D19 Legal Principles Development, Application and Assessment (Analyze managerial issues related to the law governing healthcare organizations; compliance; fiduciary responsibility)
- MHA D20 Assess Quality and Performance (Apply tools and techniques to improve quality, patient safety, and minimize risk to the organization)
- MHA D21 Project Management (Able to design, plan, implement and assess projects related to performance, market segmentation, and structure and outcomes of health services)
- MHA D22 Health Policy Formulation, Implementation and Evaluation (Identify policy issues and key stakeholders; design and evaluate policy strategies)
- MHA D23 Workforce Development Management (Define clinical and nonclinical roles and apply methods and techniques related to the management of healthcare organization employees and professional staff)

Healthcare Undergraduate Competencies

Effective 01/09/2017

Knowledge of Healthcare Environment

- HCAP A1 Healthcare Issues and Trends (Demonstrate a broad knowledge of the healthcare industry and trends involved in provision, coverage, and access to care).
- HCAP A2 Standards & Regulations (Identify standards, laws, regulatory and accreditation criteria applicable to healthcare organization).
- HCAP A3 Populations' health and status assessment (Identify basic theory, concepts and models of health promotion, disease causation and prevention; analyze trends using primary and/or secondary community and health status data).
- HCAP A4 Healthcare Personnel (Define and assess clinical and nonclinical roles and practice; related to human resources management in health care).

Business Knowledge and Skills

- HCAP B1 Organizational Dynamics and Governance (Apply organizational theory and behavior to develop, assess, design or redesign healthcare organizations).
- HCAP B2 Problem-solving and Decision-making (Formulate questions and apply models to address issues and problems).
- HCAP B3 Time Management (Ability to balance multiple tasks and responsibilities; set and meet deadlines).
- HCAP B4 Financial Management (Ability to compile and analyze financial data; develop capital, operating and cash flow budgets; analyze investment data; pro forma development).
- HCAP B5 Strategic Planning (Ability to perform environmental analysis; discern competitive strategy; formulate business strategy based on evidence).
- HCAP B6 Information Management/Understanding and Using Technology Skills (Apply techniques and methods to plan, design, implement and assess information flow and communication).
- HCAP B7 Risk Management (Assessment of risk exposure; apply methods to ensure patient and staff safety; resolution of ethical and legal issues).
- HCAP B8 Quantitative Skills (Analyze data and interpret quantitative information).
- HCAP B9 Legal principles development, application and assessment (Analyze managerial issues related to the law governing health care; compliance; fiduciary responsibility).
- HCAP B10 Marketing (Analysis and assessment of markets, market segmentation, strategy, change and innovation).
- HCAP B11 Quality Improvement/Performance Improvement (Define and assess quality and performance).
- HCAP B12 Planning and Managing Projects (Able to design, plan, implement and assess projects related to performance, structure and outcomes of health services).
- HCAP B13 Health Policy Formulation, Implementation and Evaluation (Identify policy issues and key stakeholders; design and evaluate policy strategies).
- HCAP B14 Human Resources (Apply methods and techniques related to the management of healthcare organization employees and professional staff).

Communication and Relationship Skills

HCAP C1 Interpersonal Communication (Build collaborative relationships).

HCAP C2 Presentation Skills (Demonstrate effective oral communication and presentation skills).

HCAP C3 Working in Teams (Create, participate in, and lead teams).

HCAP C4 Writing Skills (Prepare effective written and business communications).

Professionalism and Ethics

HCAP D1 Personal and Professional Ethics (Adhere to ethical personal and business principles; exhibit ethical behaviors).

HCAP D2 Professional & Community Contribution (Participate in community service; balance professional and personal pursuits).

HCAP D3 Continuing Education & Lifelong Learning (Demonstrate the importance of participating in continuing education and career planning).

Leadership

HCAP E1 Leading and Managing Others (Hold self and others accountable for organizational goal attainment).

HCAP E2 Ability for Honest Self-assessment.

HCAP E3 Systems Thinking (Understand potential impacts and consequences of decisions in a wide variety of situations).

HCAP E4 Planning and Implementing Change (Understand the importance of being able to promote and manage change).

HCAP E5 Ability to assess needs of communities and have a visionary perspective for the own organization.

Universal Undergraduate Learning Outcomes (UULO)

Effective 2016

1. Intellectual Breadth and Lifelong Learning: Graduates are able to understand and integrate basic principles of the natural sciences, social sciences, humanities, fine arts, and health sciences, and develop skills and a desire for lifelong learning. Specific outcomes for all students include:

- 1.1 Demonstrate in-depth knowledge and skills in at least one major area.
- 1.2 Identify the fundamental principles of the natural and health sciences, social sciences, humanities, and fine arts.
- 1.3 Apply the research methods and theoretical models of the natural and health sciences, social sciences, humanities, and fine arts to define, solve, and evaluate problems.
- 1.4. Transfer knowledge and skills gained from general and specialized studies to new settings and complex problems.
- 1.5 Demonstrate lifelong learning skills, including the ability to place problems in personally meaningful contexts; reflect on one's own understanding; demonstrate awareness of what needs to be learned; articulate a learning plan; and act independently on the plan, using appropriate resources.
- 1.6 Achieve success in one's chosen field or discipline, including applying persistence, motivation, interpersonal communications, leadership, goal setting, and career skills.

2. Inquiry and Critical Thinking: Graduates are able to identify problems, articulate questions, and use various forms of research and reasoning to guide the collection, analysis, and use of information related to those problems. Specific outcomes for all students include:

- 2.1 Identify problems, articulate questions or hypotheses, and determine the need for information.
- 2.2 Access and collect the needed information from appropriate primary and secondary sources.**
- 2.3 Use quantitative and qualitative methods, including the ability to recognize assumptions, draw inferences, make deductions, and interpret information to analyze problems in context, and then draw conclusions.
- 2.4 Recognize the complexity of problems, and identify different perspectives from which problems and questions can be viewed.
- 2.5 Evaluate and report on conclusions, including discussing the basis for and strength of findings, and identify areas where further inquiry is needed.
- 2.6 Identify, analyze, and evaluate reasoning, and construct and defend reasonable arguments and explanations.**

3. Communication: Graduates are able to write and speak effectively to both general and specialized audiences, create effective visuals that support written or spoken communication, and use electronic media common to one's field or profession. Specific outcomes for all students include:

- 3.1 Demonstrate general academic literacy, including how to respond to the needs of audiences and to different kinds of rhetorical situations, analyze and evaluate reasons and evidence, and construct research-based arguments using Standard Written English.**
- 3.2 Effectively use the common genres and conventions for writing within a particular discipline or profession.**
- 3.3 Prepare and deliver effective oral presentations.**

- 3.4 Collaborate effectively with others to share information, solve problems, or complete tasks.
- 3.5 Produce effective visuals using different media.
- 3.6 Apply the up-to-date technologies commonly used to research and communicate within one's field.
- 4. Global/Multicultural Knowledge and Awareness: Graduates will have developed knowledge of global and multicultural societies, and an awareness of their place in and effect on them. Specific outcomes for all students include:
 - 4.1 Demonstrate knowledge of the history, philosophy, arts, and geography of world cultures.
 - 4.2 Respond to diverse perspectives linked to identity, including age, ability, religion, politics, race, gender, ethnicity, and sexuality; both in American and international contexts.
 - 4.3 Apply the concept of social justice.
 - 4.4 Demonstrate familiarity with a non-native language, or experience living in a different culture.
 - 4.5 Function effectively in diverse groups.**
 - 4.6 Demonstrate awareness of one's own place in and effect on the world.
- 5. Citizenship and Ethics: Graduates are able to participate knowledgeably and actively in the public life of our communities and make informed, responsible, and ethical decisions in their personal and professional lives. Specific outcomes for all students include:
 - 5.1 Acquire knowledge of political, economic, and social institutions.
 - 5.2 Identify the various rights and obligations that citizens have in their communities.
 - 5.3 Apply various forms of citizenship skills such as media analysis, letter writing, community service, and lobbying.
 - 5.4 Explain the concept of sustainability as it impacts economic, environmental, and social concerns.
 - 5.5 Examine various concepts and theories of ethics, and how to deliberate and assess claims about ethical issues.
 - 5.6 Apply ethical concepts and theories to specific ethical dilemmas students will experience in their personal and professional lives.

Please note: Bolded UULOs align with CEPH BSPH Competencies below

CEPH Undergraduate BSPH Competencies

Revised 08/07/2025

1. Public Health Communication: Communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences; diverse audiences include non-academic, non-peer audiences, with attention to matters such as literacy and health literacy

C1 Oral communication

C2 Written communication

C3 Communicate with diverse audiences; diverse audiences include non-academic, non-peer audiences, with attention to matters such as literacy and health literacy

C4 Communicate through variety of media

2. Information Literacy: Students should be able to locate, use, evaluate, and synthesize information

IL1 Locate information

IL2 Use information

IL3 Evaluate information

IL4 Synthesize information

UULO to CEPH BSPH Competency Alignment

UULO	CEPH
3.3	C1
3.2	C2
3.1, 4.5	C3
3.5	C4
3.1, 2.2	IL1
3.1, 3.2	IL2
3.1, 2.6	IL3
3.1	IL4