

MASTER OF PUBLIC HEALTH (MPH)

MPH 621. U.S. Health Care & Public Health Syst. (3 Credit Hours)

This course is a comprehensive analysis of the U.S. health care delivery system including the interface with the public health system from a systems approach. Components studied include: Roles of the health care team and practice settings; trends in health care services financing and reimbursement in public and private systems. Formal, informal, financial, and political relationships between and among these components are discussed. Students analyze potential problems and solutions as well as trends in health services delivery, health care policy, and regulation; and, consideration of differences between the U.S. health care and public health systems as compared and contrasted with these systems in other countries. Students participate on interprofessional teams to explore cultural diversity and social determinants of health.

MPH 626. Org Behavior & Leadership Theory. (3 Credit Hours)

This course will provide a broad introduction to the theory, structure, and function of organizations, and the behavior of working in people in them. The primary purpose of the course will be to equip students with an understanding of organizational theory and related practical techniques for managing effectively in complex health care environments.

MPH 644. Health Care Economics and Policy. (3 Credit Hours)

This course is an introduction to the theoretical foundations of health care economics and its application to the health care industry and to the field of health policy. This course presents health care economics as a main source of rapid changes in health care markets and includes studies of consumer and provider behavior, health insurance, market structure, government interventions, and economic evaluation methods. This course will also provide students with an understanding of the process of health policy analysis and its implementation.

MPH 645. Community Health Program Planning & Eval. (3 Credit Hours)

This course will provide an overview of community assessment, coalition development, data collection tools, and health improvement planning. Principles of formal program evaluation will include the nature of evaluation, the role of evaluation in the program life cycle, the relationship of statistical processes to specific evaluation designs, sampling, survey development, data collection and analysis and interpretation of research findings.

MPH 650. Basic Statistics. (3 Credit Hours)

This course provides students foundational skills needed to analyze quantitative and qualitative data using statistical techniques. The course emphasizes the use of computer-based analysis techniques while addressing the need for public health informatics. Topics covered include data acquisition, types of data, univariate and bivariate data summarization techniques, tabular and graphical data presentation, and the use of inferential statistical techniques. After completing this course students will be able to apply statistical techniques for data analysis and interpret the results of the analysis in order to make decisions about public health programs and policy.

MPH 651. Environmental and Occupational Health. (3 Credit Hours)

This course is an introduction to environmental and occupational health. Current and historical environmental and occupational events and policies will be explored and how they have shaped public health practice today will be considered. Students will engage in discussion and analysis of environmental and workplace hazards as they consider how these influence individual and population health. Students will come to understand that where people live and work and what they eat has a profound influence on overall health and safety.

MPH 652. Public Health Law, Ethics, and Policy. (3 Credit Hours)

An overview of various legal and ethical challenges facing individuals and organizations, this course utilizes a variety of modalities to apply ethical principles and legal concepts to public health practice. Current events, healthcare reform, and public health practices will be addressed to enhance the ability to assess public health practices, respond to challenges and be able to participate in meaningful policy development guided by the foundation of legal and ethical principles.

MPH 653. Public Health Leadership, Admin & Financ. (3 Credit Hours)

This course serves to support developing, entry-level competencies in public health administration and management. Topics include leadership and management of public health services, vision, mission and goal development, communication and collaboration in public health, financial management and budgeting, quality improvement, assessment and evaluation, strategic planning, public health policy, and other emerging topics necessary for the effective delivery of public health services.

MPH 654. Social and Behavioral Sciences. (2 Credit Hours)

This course examines the sociocultural, psychological, and behavioral factors that interact with biological factors to influence health outcomes. Prominent health behavior theories and frameworks that guide health promotion activities are summarized. Moreover, students will be introduced to the concept of health equity and will receive a broad overview of health disparities and social determinants of health in the United States.

MPH 655. Epidemiology. (3 Credit Hours)

Introduces students to the principles of epidemiology, including historical overview; descriptive methods and sources of data; diagnostic screening; study designs; analytical tools; measures of association; bias and confounding. Emphasis is placed on the critical evaluation and interpretation of public health research, using examples from the literature. Students develop problem-solving skills and an understanding of evaluation and research.

Prerequisite: MPH 650

MPH 656. Public Health Biology. (3 Credit Hours)

This course provides general principles of the biological sciences and offers populations perspective on biological concepts related to public health issues including malnutrition, chronic and infectious diseases. The course will help students to understand the development, treatment and prevention of disease, and to assess risk from potentially hazardous agents and behaviors of public health issues. It is intended for students regardless of their backgrounds in the biological sciences. Lectures will include the appropriate background material in biology, physiology, nutrition, genetics, and pathophysiology to allow students to understand the biological mechanisms of disease prevention and progression. Specific topics will include diseases and conditions that are most frequently discussed in current public health settings, including infectious disease, cardiovascular disease, obesity, cancer and vaccines.

MPH 658A. Public Health Internship Continuation. (0 Credit Hours)

Public Health Internship Continuation

MPH 659. Integrative Learning Experience I. (1 Credit Hour)

The MPH Integrative Learning Experience (ILE) I prepares students for the culminating experience. During this one-term ILE I seminar course, students explore policies and procedures of the culminating experience; secure an external, qualified preceptor; select a faculty mentor (typically their advisor); determine the competencies that will be synthesized during the experience; and prepare their project proposal determining the scope of work for their project. ILE projects should be of interest to the student, relevant to public health practice, and provide the opportunity for the student to demonstrate synthesis of selected competencies. Students form an ILE Committee (faculty mentor, preceptor, and ILE instructor). The final product is a high quality, well-written proposal (including a complete literature review and proposed methods) for the project to be carried out in ILE II.

Prerequisites: MPH 621, MPH 650, MPH 651, MPH 653, MPH 655

MPH 660. Integrative Learning Experience II. (2 Credit Hours)

During Integrative Learning Experience II (MPH 660) students implement the project proposed in ILE I. Students are expected to demonstrate integration, synthesis, and application of key public health competencies throughout their work with external public health stakeholders. Students complete: 1) a final product reflective of the specific ILE project type, 2) a reflection on the experience; 3) a poster; and 3) an oral presentation to the ILE Committee and stakeholders. Students may take up to two terms to complete their ILE II.

Prerequisites: MPH 621, MPH 650, MPH 651, MPH 653, MPH 655 and total of 24 credit hours. For students admitted in 2016 or later, MPH 659 is also a prerequisite. ILE Instructor approval is required for all enrollments in MPH 660.

MPH 660A. Integrative Learning Exp II Continuation. (0 Credit Hours)

The MPH Capstone / Integrative Learning Experience (ILE) II continuation course. Students may take up to two terms to complete ILE II. Students must register for the continuation course if a second term is needed to complete requirements.

MPH 661. Public Health Applied Practice Exp. (2 Credit Hours)

A planned, supervised, and evaluated practice experience is an essential component of a public health degree program. This course provides students the opportunity to apply their public health knowledge and further develop their professional skills through a hands-on experience in a public health setting. Students will also demonstrate attainment of public health competencies through the development of a portfolio.

Prerequisite: Students must have 40 credit hours completed and/or in-progress to register.

MPH 661A. Pub Hlth Applied Prac Exp Continuation. (0 Credit Hours)

The Public Health Applied Practice Experience Continuation Course. Students may take up to two terms to complete the Public Health Applied Practice Experience. Students must register for the continuation course if a second term is needed to complete requirements.

MPH 661T. Public Health Applied Prac Exp. (2 Credit Hours)

A planned, supervised, and evaluated practice experience is an essential component of a public health degree program. This course provides students the opportunity to apply their public health knowledge and further develop their professional skills through a hands-on experience in a public health setting. Students will also demonstrate attainment of public health competencies through the development of a portfolio.

MPH 671. Community Research Methods. (3 Credit Hours)

This course will provide students with a comprehensive overview of the methods used in the scientific research of public health. The content of this course includes experimental and non-experimental research designs, sampling, measurement, reliability and validity, data collection procedures and methods and generalizability of findings. This course provides instruction on basic research methodology to be applied in investigations that target health and health care related issues in the context of a community setup.

MPH 680. Prog Planning & Eval Resrch 1. (2 Credit Hours)

This course gives students an overview of the research methods that are commonly applied in public health practice. It focuses on providing the knowledge and skills that are required to collect quantitative and qualitative data to support public health decisions. The methods covered include approaches that are used to (a) identify and classify the health needs of a population, (b) determine risk factors for morbidity or mortality, (c) evaluate applied practice and/or the impact of health policies on health outcomes, and (d) develop and test new interventions for preventing illnesses.

MPH 681. Prog Planning & Eval Resrch 2. (2 Credit Hours)

This course builds upon the general concepts, skills, and tools that are learned in research methods I course, to further provide students with an opportunity to focus on program planning and evaluation. Students will cultivate such skills as building collaborative relationships, creating and deploying data collection tools, developing and implementing health improvement plans, creating a public health project budget, and addressing the relevance of policy and cultural competency in public health practice. After completing the two series of course students will be able to identify study design and data collection methods that are appropriate for needs and risk assessment, applied practice and outcomes evaluation.

Prerequisite: MPH 680

MPH 682. Leading Multisector Partnership in PH. (2 Credit Hours)

The most important factors affecting individual and community health often occur outside the health sector and across the levels of individuals, organizations, communities, and policies. Public Health 3.0 is an approach to address the complex issues, gaps and social determinants that impact population health. Students will learn how to create cross-sector partnerships that promote innovative organizational structures, create shared vision, sharing of resources, and long-term strategies for health and health equity. Traditional lectures combined with interactive discussions, student-led presentations, and collaborative projects will provide students with the skills to use tools, strategies, and collaborations to create sustainably healthier and more equitable communities.

MPH 683. Chronic Disease Management and Policy. (3 Credit Hours)

Chronic condition prevention and control is central to the role of health services administration. This course will examine chronic disease epidemiology, medical care models, and pharmaceutical and health policies across the chronic disease continuum - upstream, socioeconomic determinants; individual behaviors; chronic conditions; chronic disease; disability and death. Students will examine the chronic care model and evidence-based intervention policies and programs by exploring and evaluating chronic disease policy tools to estimate the costs of chronic conditions and economic burden of the disease.

MPH 684. Health Care Disparities & Health Equity. (2 Credit Hours)

This course describes the complex interplay of social, political and economics drivers associated with health disparities and inequities. This course examines the history and scope of health inequities in the United States and introduces tools and frameworks for identifying health disparities and the causes of health inequities. It presents strategies to improve health equity and population health.

MPH 685. Foundations of Health Promotion. (2 Credit Hours)

This purpose of this course is to prepare Master of Public Health candidates to begin their careers in health education and promotion by fostering skills needed for lifelong learning and ongoing professional development. This course provides a unique opportunity for candidates to demonstrate their learning with faculty, support the growth and understanding of peers, and develop a plan to integrate the NCHCEC competencies into their scholarly and practical work.

MPH 686. Communication and Social Marketing. (3 Credit Hours)

This course introduces the application of communication theory, research, and practice to the public health context, including provider-patient communication, health information campaigns, and health beliefs and behavior. Moreover, this course integrates social marketing concepts with other public health approaches to equip students to design products, promote policies, and influence behaviors for the greater social good. Inherent in these discussions will be an emphasis on the importance of cultural humility and competence in communicating public health content.

MPH 687. Health Policy and Advocacy. (3 Credit Hours)

This course provides a framework to understand the essential role advocacy plays for the public health professional in promoting and implementing effective public health policy and programs. Students will be able to describe the relationship among advocacy, policy change, and public health practice by examining the policy making processes within the legislative, executive, and judicial branches of government at the local, state, and national levels and the role of stakeholder groups and media in shaping health policy and framing health policy issues. Students will gain practical experience by defining a public health issue, analyzing policy options, conducting a stakeholder analysis, and preparing a legislative policy brief and presentation.

MPH 690. Prog Plan, Imple, & Eval I. (3 Credit Hours)

Although program planning, implementation, and evaluation are commonly described in a linear sequence, they constitute a cyclical and interdependent process. Accordingly, this course provides an overview of research methods commonly applied in program evaluations. Students will learn how to select, adapt, and/or create valid and reliable data collection instruments; develop sampling plans; collect and manage data; analyze collected data; interpret and report findings; and identify desired outcomes, goals, and SMART objectives for a health promotion program tailored for a priority population based on a community health assessment. The latter will provide students the foundation to plan and implement a program, representing the foci of the sequential course, MPH 691.

MPH 691. Prog Plan, Imple, & Eval II. (3 Credit Hours)

This course provides students the skills needed to plan and implement a health promotion intervention based on their community health assessment conducted in MPH 690. Students will learn how to select planning model(s) and health behavior theories to guide health promotion interventions; adopt, adapt, and/or develop a tailored intervention for the priority population to achieve desired outcomes; develop plans and materials for implementation; coordinate the delivery of an intervention consistent with the implementation plan; and monitor implementation.

MPH 711. Grant Writing and Management. (2 Credit Hours)

This course will prepare students to develop grant proposals in today's funding environment. The course will provide students with training in the three major elements of grant writing: preparation, proposal writing, and award management. The course offers a practical approach to obtaining grant funds from private sources and public sources at the federal, state and local levels.

MPH 712. Public Health and Promotion Methods. (3 Credit Hours)

This course extends beyond the fundamentals of public health needs assessments and program planning, implementation, and evaluation. Students will acquire tools to apply public health methods and strategies, including (1) developing effective presentations and trainings, including staff training to ensure program fidelity, (2) developing and selecting program resource materials, (3) using social media in public health interventions, (4) leveraging media outlets to increase program reach, (5) and effectively collecting data through a variety of qualitative methods.

MPH 713. Research Methods and Health Promotion. (3 Credit Hours)

This advanced public health research methods course examines the concepts, methods, and applications of research within the field of health education and promotion. Emphasis will be on qualitative research methods. This course is designed to enhance students' skills to plan, manage, and evaluate research studies and health promotion programs in the context of public health promotion.

MPH 714. Data Management. (3 Credit Hours)

This course provides students foundational skills needed to manipulate and understand data via computational software. The course emphasizes the use of fundamental computer-based management techniques to format data that is commonly seen in epidemiology and public health. After completing this course students will be able to utilize data management practices in computational software using public health data and surveillance.

MPH 715. Fundamentals of Statistical Modeling. (3 Credit Hours)

This course provides students the foundational skills needed to analyze quantitative data using statistical techniques. The course emphasizes the use of computer-based analysis techniques to model data that is commonly seen in epidemiology and public health. Topics covered include general linear methods for continuous, count, and categorical data. After completing this course students will be able to apply statistical modeling techniques for data analysis and interpret the results of the analysis.

MPH 716. Applied Epidemiology. (3 Credit Hours)

This course builds upon the foundational knowledge from MPH 650, MPH 655, and MPH 714. This course focuses on the practical application of epidemiology in public health. Through lectures and assignments, students will deepen their knowledge of epidemiology, strengthen application of descriptive and analytic epidemiology, reinforce epidemiological study designs, gain hands-on analytic experience, and enhance epidemiologic principles in the context of the public health surveillance system in this course. This course covers more quantitative approaches and interpretation from an epidemiological perspective, including calculation and, where appropriate, statistical multivariate modeling; evaluation of bias, effect modification, and mediation; and life table analysis.

MPH 717. Applied Epidemiology Research I. (2 Credit Hours)

This is the first course in a two-course sequence on epidemiological research methods. In this first course, students will create a research question, identify and describe an appropriate dataset for answering the research question, and design a rigorous methodological plan that includes framing within the scientific literature, use of conceptual frameworks, and attention to validity and feasibility. By the end of the course, students will prepare and defend a formal research proposal orally and in writing.

MPH 718. Applied Epidemiology Research II. (2 Credit Hours)

This is the second course in a two-course sequence on epidemiological research methods. This applied course guides MPH students through the process of analyzing, interpreting, and disseminating epidemiologic research. Emphasis is placed on analyzing data and translating statistical results into meaningful epidemiologic conclusions with clearly highlighted public health implications. Students will synthesize their work into a professional written report that mirrors the structure of a peer-reviewed manuscript and will present their findings in an oral presentation to peers and faculty.

MPH 768. Emergency Preparedness & Management. (3 Credit Hours)

This is an analysis of emergency public health preparedness and response. Preparing for a public health emergency is a part of the larger issues for preparing for and responding adequately to any type of public health disaster. Components studied include government capacity, public health law, public-private partnerships during emergencies, public health tools during emergencies, infectious disease emergencies, terrorism, natural disasters, industrial emergencies and special populations and issues.

MPH 772. Cardiovascular Epidemiology. (3 Credit Hours)

This course is aimed to enable the students to become familiar with principles, methods and issues in the epidemiology of cardiovascular disease. This course focuses on public health-oriented coronary artery disease, and its major traditional and novel risk factors; and also covers other topics such as cardiovascular prediction models, hypertension, stroke, sudden cardiac death, and subclinical cardiovascular disease. The format includes seminar-style courses, lectures, group activities, and projects.

Prerequisites: MPH 650, MPH 655, MPH 656 or clinical dual degree student

MPH 773. Nutritional Epidemiology. (3 Credit Hours)

The purpose of this course is to introduce students to the discipline of nutritional epidemiology. We will focus on the application of epidemiological methods to studies of diet, nutrition, and diseases. Students completing this course will understand the basic principles of nutritional epidemiology and will be able to apply them in reading the literature and participating in nutrition research projects. The format includes seminar-style courses, lectures, group activities, and projects.

Prerequisites: MPH 650, MPH 655, MPH 656 or clinical dual degree student

MPH 778. Secondary Data Analysis. (3 Credit Hours)

This course introduces students to the methods of searching for, obtaining, storing, manipulating and analyzing publicly available research data. Students will get hands-on experience of research and data handling including data cleaning, standardization and analysis. In addition, students will also learn to write a research report for publication.

MPH 783. Foundations of Global Health. (2 Credit Hours)

This course will examine principals of global health and the interconnectedness of countries' health status in today's world of modern travel and communication systems. Integrated primary care and public health delivery systems are examined through the lens of issues and challenges facing low- and middle-income countries. Topics explored include trends in maternal and child health, health and the environment, and cultural impacts on health. The leadership of the World Health Organization and Centers for Disease Control and Prevention will be analyzed. Students will analyze priority global health issues as to causes, individual and societal impact, and current and future strategies to mitigate and prevent harmful consequences of communicable and non-communicable diseases.

Prerequisite: MPH 621

MPH 785. Global Health Policy and Advocacy. (3 Credit Hours)

This course explores the new reality of globalization which requires public health professionals to view population health through a kaleidoscope of economic, geo-political, technological, social, and cultural connections between individuals and groups of people around the world. These connections intersect through policies, practices, and partnerships which ultimately determine the health status of populations. This course explores the international community's response to health determinants and the impact of policy and advocacy. Understanding governmental and non-governmental partnerships is essential to improving living and health conditions in low- and middle-income countries, as well as critically analyzing the role of high-income countries in improving health outcomes globally. Students will synthesize complex knowledge about roles and interrelationships of partnerships and how to advocate effectively.

MPH 899. Independent Study. (1-3 Credit Hours)

This course is designed for students to independently investigate topics outside the context of a traditional course. Students collaborate with an M.P.H. faculty member to pursue a topic of mutual interest. Independent study projects may involve topics such as global health trips and research projects or exploring a special topic in more depth than what is covered in the curriculum. Students collaborate with a faculty member to establish measurable learning objectives and a schedule or plan and to establish roles and responsibilities for the student and supervising faculty member. Students must have a minimum 3.0 GPA to enroll and independent study projects must be approved by the Program Director prior to enrollment.