MASTER OF PUBLIC HEALTH (MPH)

MPH 620. Intro to Graduate School & MPH Program. (1 Credit Hour)
This course, required for graduate students seeking a Master in Public Health degree, provides a foundation for critical analysis of current public health issues. It facilitates discussion of contemporary issues and challenges of public health policy and practice. Key topics include history and core functions of public health; balancing individual and societal rights; public health ethics; social determinants of health; health disparities; cultural competence, socio-ecological approaches to promote health; public health concerns in urban communities; and current public health practice.

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 625. Health Care Financial Management I. (3 Credit Hours)
This course provides a basic understanding of health services financial management with emphasis on the not-for-profit entity. We will begin with elementary accounting concepts and then focus on discounted cash flow analysis, risk, financial statements, capital investments, debt and equity financing, capital budgeting and health care reimbursement models. The course blends accounting and finance concepts to enhance the health care manager’s decision-making skills using accounting and finance theories, principles, concepts and techniques most important to managers in the health care industry.
Prerequisites: MPH 620, MPH 621

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 627. Legal and Ethics I. (2 Credit Hours)
Health law and bioethics are broad, dynamic and interrelated fields. This course will address major legal, ethical, and policy aspects of controversies in clinical health care delivery. Students will gain a working knowledge about how law and ethics can be applied to real-world health care issues.

MPH 628. Legal and Ethics II. (2 Credit Hours)
This course provides an overview of legal and ethical issues facing the health care industry. Students will gain a working knowledge about the influence that laws, policies and ethics have on the regulation, structure and financing of the American health care system.
Prerequisite: MPH 627

MPH 629. Organizational Development I. (3 Credit Hours)
This course will incorporate a survey of contemporary organizational theory focusing on concepts relevant to health service organizations and systems with emphasis on organizational environment, goals, strategy, structure and processes. The course provides a comprehensive overview of the key factors affecting an organization and exposes the student to theories that suggest effective organizational responses to such influences and changes.

MPH 630. Health Care Financial Management II. (3 Credit Hours)
This course builds on the foundational learning from Health Care Financial Management I. We will shift our focus to for-profit entities within the health care sector. The course goes into greater depth on discounted cash flow analysis, risk, financial performance evaluation, capital investments, capital budgeting, debt and equity financing. A key objective of this class is to develop the student's ability to engage in long-term financial forecasting and planning. Students will complete a comprehensive financial forecast as their final project for this field of study.
Prerequisite: MPH 625

MPH 631. Health Information Management. (3 Credit Hours)
This course prepares students practicing in the health care industry to effectively identify, use and manage health information technologies. Specific topics include an introduction to technologies and information systems supporting health care organizations; technology security; regulatory and compliance issues; system acquisition, implementation and support; health information exchange; alignment of technology initiatives; strategic planning; and assessing value in health information technology.

MPH 633. Population Health and Managerial Epidem. (2 Credit Hours)
This course is a demonstrated application of the concepts of population health and tools of epidemiology to the health care management decision-making process. It requires the student to effectively integrate the public health and healthcare systems to focus on population health improvement while simultaneously minimizing health inequities in an efficient and affordable manner. The students will demonstrate how the practice of epidemiology is used to support complex managerial functions. Key topics included in this course include the following: introduction to Institute for Healthcare Improvement (IHI) Triple Aim framework, descriptive/analytic epidemiology, health determinants and their impacts, elements of data-driven approach to population health, and the application of managerial epidemiology.

MPH 644. Health Care Economics and Policy. (3 Credit Hours)
An introduction to the theoretical foundations of health care economics and its application to the health care industry and payment systems and to the field of health policy both at the national and state level. The course presents health care economics as a main source of rapid changes in health care markets, and includes studies of provider behavior, insurance, expenditures, market structure, competition, costs, utilization, and access on the economics side, and cost-and case-based reimbursement and capitation on the reimbursement side. 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 646. Strategic Marketing and Communications. (3 Credit Hours)
This course is designed to build innovative, customer-centered thinking within the future leaders of the health care industry. This is accomplished with an introduction to the role of strategic decision-making through the core principles of marketing (the four Ps). Students will also experience basic database management, the conduct of an internal and external environmental analysis, primary and secondary data gathering and interpretation and creation of a marketing plan to meet an unsatisfied market need or build volume for a health care product or service. Finally, the role of corporate communication will be interwoven throughout the course as it supports marketing success.

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 needs for public health informatics. Topics covered include data acquisition, types of data, univariate and bivariate data summarization techniques, tabular and graphical data presentation, the use of inferential statistical techniques and multivariate 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 as we consider how they have shaped public health practice today. 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.

Prerequisite: MPH 0621

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. (3 Credit Hours)
This course examines the theoretical foundations of public health, specifically, in the context of health behavior change and promotion. Students will gain an understanding of the prominent public health theories that may be used in a variety of settings by a variety of health professionals in research and practice. Moreover, the instructor will discuss how socioecological factors, such as social inequities, undermine health and create challenges to promoting health behaviors and achieving health equity.

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 0650

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 658. Public Health Internship. (3 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.

Prerequisites: MPH 0620, MPH 0621, MPH 0650, MPH 0651, MPH 0653, MPH 0654, MPH 0655, and total of 24 credit hours. To register for this course contact the Internship Coordinator.

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

MPH 659. Integrative Learning Experience I. (1 Credit Hour)
The MPH Capstone Seminar / Integrative Learning Experience (ILE) I prepares students for the MPH Capstone / ILE. During this course students explore policies and procedures of the culminating experience. Students will secure an external preceptor, identify program competencies to be addressed with their project, and prepare their project proposal, including a complete literature review and proposed methods.

Prerequisites: MPH 0620, MPH 0621, MPH 0650, MPH 0651, MPH 0653, MPH 0654, MPH 0655

MPH 660. Integrative Learning Experience II. (2 Credit Hours)
The MPH Capstone / Integrative Learning Experience (ILE) II serves as the culminating experience of the MPH program. Students are expected to demonstrate integration, synthesis, and application of key public health competencies throughout their work with external public health stakeholders. Students complete a high-quality written report, and oral presentation. Students may take up to two terms to complete their ILE.

Prerequisites: MPH 0620, MPH 0621, MPH 0650, MPH 0651, MPH 0653, MPH 0654, MPH 0655 and total of 24 credit hours. To register for this course contact the Capstone Coordinator.

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.

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.

Prerequisite: MPH 0650
Prerequisite: MPH 0654 (may be taken as a co-requisite)

MPH 680. Program Planning & Evaluation Research 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. Program Planning & Evaluation Research 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.

MPH 682. Integration of PH & Primary Care. (2 Credit Hours)
This course examines systemic challenges to integration of primary care and public health services. The course approaches population health improvement from a prevention and interdisciplinary perspective. Application of public health interventions to address social determinants of health within a primary care setting are proposed. Students analyze models of collaboration between public health services and primary care delivery in the U.S. for both urban and rural settings. Special populations, such as immigrant and refugee groups, are considered. Primary care and public health partnerships within various reimbursement systems, such as Accountable Care Organizations and Primary Care Medical Homes, are explored. Establishing and selecting evaluation metrics for community health improvement are analyzed relative to goals of a proposed collaboration.

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. (3 Credit Hours)
This course prepares students as public health professionals working in state and local health departments to develop or support programs to address health care disparities in their communities or institutions. The session begins with a discussion of why health care disparities should be involved in developing policies around health care delivery system and how health care and public health administrators can lead the charge. Next, learners will explore the fundamentals of health care disparities in relation to various areas in the US health care delivery system. Finally, learners will explore case studies that demonstrate how public health agencies could plan and implement programs to maintain health equity.

MPH 685. Foundations of Health Promotion. (2 Credit Hours)
The purpose of this course is to identify the evidence base for health promotion and illustrate the range of health promotion practice. The course examines the theoretical concepts of health, health education and health promotion and the ethical and political aspects of research and practice; it explores strategies to promote health and some of the dilemmas that they pose; it illustrates how a range of different settings, such as hospitals and schools, can be oriented towards positive health and well-being; lastly, it focuses on the implementation of health promotion interventions and is designed to help public health researchers and practitioners to reflect on their approach to health promotion by examining what drives their choice of strategy.

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 711. Grant Writing and Management. (2 Credit Hours)
This course will prepare you to develop grant proposals and program level proposals in today's funding environment. The course will provide you with training in the three major elements of grantsmanship: preparation, proposal writing and award management. It offers a practical approach to obtaining grant funds from public or private sources at the federal, state and local levels.

**MPH 712. Community and Family Health. (3 Credit Hours)**
The purpose of this course is to provide students with an introduction to family and community health. Topics include a historical view of community and public health, the relationship of community and public health with community based organizations, community organizing, mental health, drug use and abuse, and school health. The course will examine the key causes of morbidity and mortality throughout the life course for populations including mothers, infants, and families, adolescents and young adults, and older adults while taking into consideration key social, political, behavioral, and environmental factors that influence the health of the community. Additionally, disparities in population health outcomes, policies, and research needs will be discussed.

**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 749. Field Based Learning. (3 Credit Hours)**
This course serves a culminating experience in which students are expected to apply knowledge gained from their graduate experience. The course is designed to provide a field based experience in which students demonstrate mastery of the program's curriculum and allow an opportunity for closure and connection between courses. The purpose of this field-based experience is to facilitate the integration and synthesis of program content through critical thinking; it is also a turning point for the student from education to professional practice.

**Prerequisites:** MPH O620, MPH O621, MPH O650, MPH O651, MPH O653, MPH O654, MPH O655, MPH O671 and 24 credit hours

**MPH 766. Geographic Information Systems. (3 Credit Hours)**
Geographic Information Systems (GIS) are computerized systems designed for the storage, retrieval and analysis of geographically referenced data. GIS maps all sorts of physical, biological, cultural, demographic and economic data. This course uses a unique approach for teaching GIS in health care. It imbeds learning how to use GIS software in the context of carrying out projects for visualizing and analyzing health-related data. The course includes a lecture and computer lab that focuses on a health care issue that uses ArcView GIS from ESRI, Inc. to analyze data or solve a problem. Through assignments and project case studies, students will not only learn how to use the software but will also learn the many distinctive advantages of using GIS for health care policy making and planning. By the end of the course, students will have sufficient background to become savvy users of GIS in health care organizations - building, managing and using GIS maps and health-related data.

**MPH 768. Policy & Practice: Emergency Preparedness. (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 O650, MPH O655, MPH O656 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 O650, MPH O655, MPH O656 or clinical dual degree student

**MPH 774. Management of Infectious Disease. (3 Credit Hours)**
This course is an overview of infectious diseases in humans including those that are shared between humans and animals. Lectures will focus on the interaction of human and animal health, infectious disease epidemiology, routes of infection, signs, control and prevention, emergence of new diseases, and the role of public health in managing these issues. Some diseases will be covered in-depth while others will be addressed in overview. Topics include: emerging diseases, anthrax, petting zoos, HIV/AIDS, plague, food and milk safety, leptospirosis, influenza, and more.

**MPH 777. 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 O621
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.