

School of Community and Environmental Health

3118 Health Sciences Building
757-683-4259
<http://www.odu.edu/commhealth> (<http://www.odu.edu/commhealth/>)

Dr. James Blando, Chair

The School of Community and Environmental Health offers graduate programs which lead to careers in health services research, public health, health care administration, and environmental health. ODU offers a Master of Public Health degree designed to prepare students for entry and/or advancement in public health careers.

Programs

Certificate

- Occupational Safety Certificate (<http://catalog.odu.edu/graduate/health-sciences/community-environmental-health/occupational-safety-certificate/>)

Master of Public Health Programs

- Public Health with a Concentration in Behavioral Health and Health Promotion (MPH) (<http://catalog.odu.edu/graduate/health-sciences/community-environmental-health/public-health-behavioral-promotion-mph/>)
- Public Health with a Concentration in Epidemiology of Infectious Disease (<http://catalog.odu.edu/graduate/health-sciences/community-environmental-health/public-health-applied-epidemiology-data-analysis-mph/>)
- Public Health with a Concentration in Global Environmental Health (MPH) (<http://catalog.odu.edu/graduate/health-sciences/community-environmental-health/public-health-global-environmental-mph/>)

Linked Bachelor of Science in Public Health (BSPH) to Master of Public Health (MPH) Program

The linked Bachelor of Science in Public Health (BSPH) to Master of Public Health (MPH) program provides qualified ODU undergraduate students with the opportunity to earn a Master of Public Health degree while taking up to 12 credits of the MPH program as an undergraduate student. Students in the linked program must earn a minimum of 151 credit hours (120 discrete credit hours for the undergraduate degree and 31 discrete credit hours for the graduate degree).

The program is designed for highly motivated students with the desire to continue their education after the baccalaureate (BSPH) degree. It is especially relevant to individuals seeking to work (or currently working) in the public health or non-profit sectors. Successful applicants must have demonstrated both a mature attitude and superior academic achievement. They must be recommended to the program by their major advisor or program director.

Linked BSPH to MPH program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the linked program work in close consultation with the BSPH Director and the MPH Program Office to develop an individualized plan of study based on the required coursework.

Well-qualified undergraduate students (overall program GPA of 3.5 and above) may take MPH-level courses as early as four semesters prior to their graduation and count up to 12* graduate credit hours toward their undergraduate degree. After receiving the undergraduate degree, a student will continue with the MPH program, taking MPH courses until completing the required 43 credit hours.

**For additional information, please contact the Program Directors at bsph@odu.edu or mph@odu.edu.*

Admission Information

Applicants for the linked BSPH to MPH program must meet the following requirements:

- Current Old Dominion University BSPH program student.
- Complete general education requirements by the end of Junior year.
- Apply to the linked program after completion of a minimum of 60 credits and before completion of 105 credits.
- A minimum cumulative grade point average (GPA) of 3.5 or higher at the time of application.
- Complete an interview with the BSPH Program Director and the MPH Program Director.
- Apply to the MPH program via Graduate Admissions no later than the June 15 application deadline, including a personal statement, two letters of recommendation including one letter of recommendation from the Undergraduate Program Director, and other application requirements set by the MPH program (<https://www.odu.edu/academics/programs/masters/public-health/>).
- Student progress will be reviewed at the end of Junior and Senior years by the undergraduate and graduate program directors.
- Once admitted to the linked program, students must maintain a 3.0 GPA or above throughout the program. Undergraduate students who fail to maintain a 3.0 GPA may revert to the regular BSPH program and count up to 12 hours of completed graduate coursework toward the undergraduate degree.

MPH/MPA Dual Degree

Students can pursue a Dual Master's degree program in MPH and MPA. For additional information please contact one of the Graduate Program Directors at mph@odu.edu or mpa@odu.edu.

Courses

Community Health Professions (CHP)

Health Sciences (HLSC)

HLSC 525 Health Aspects of Aging (3 Credit Hours)

Identifies major issues and problems in meeting health care needs of the aged. Emphasis on role of social assets and supports in determining effects of life changes on the aging process.

Prerequisites: Permission of the instructor

HLSC 530 Community Health Resources and Health Promotion (3 Credit Hours)

Designed to provide information about community health resources and health promotion theory.

Prerequisites: Permission of the instructor

HLSC 540 Finance and Budgeting in Healthcare (3 Credit Hours)

This course covers financial management functions in healthcare organizations including operating and capital budgeting processes along with budgeting and financial controls.

Prerequisites: Permission of the instructor

HLSC 545 Health Services Research Methods (3 Credit Hours)

This course focuses on health services research and its assessment abilities and application in health care and public health. Topics include the use of EXCEL, SAS, and SPSS to analyze data. An exploration of the issues and challenges of health services research for health related organizations and other organizations. Statistical procedures and practices will also be conducted.

Prerequisites: STAT 130M or permission of the instructor

HLSC 550 Public and Community Health Administration (3 Credit Hours)

A review of the principles and practice of administering public and community health organizations and programs at federal, state, and local levels. Constitutional, statutory and administrative bases for organizing and conducting public/community health programs will be discussed.

Prerequisites: Permission of the instructor

HLSC 561 Managerial Epidemiology (3 Credit Hours)

This course will blend theory and application of epidemiology. This course will also provide a comprehensive introduction to epidemiology and explain how to use epidemiological concepts and tools to improve decisions about the management of health services.

Prerequisites: STAT 130M or permission of the instructor

HLSC 565 Policy and Politics of Health (3 Credit Hours)

This course will explore both health policy and the politics of health. Students will develop an understanding of the systematic and analytical framework for developing health and health care policy issues.

Prerequisites: Permission of the instructor

HLSC 575 Healthcare Marketing (3 Credit Hours)

This course provides a basic understanding of marketing in a health care setting. This course will cover the following: the history of marketing in a health care setting, health care markets, marketing techniques, and leadership skills in managing and supporting the marketing efforts.

Prerequisites: Permission of the instructor

HLSC 580 Health Ethics and the Law (3 Credit Hours)

This course provides the students with a basic knowledge of health law and examines legal issues confronting health services administrators in various health care environments.

Prerequisites: Permission of the instructor

HLSC 585 Health Informatics (3 Credit Hours)

This course focuses on healthcare informatics (information systems) and application in health care organizations. It provides an overview of health information system concepts, management, and integration of technology in healthcare organizations.

Prerequisites: Permission of the instructor

HLSC 595 Topics in Public/Community Health Administration (1-3 Credit Hours)

This course provides the opportunity for the study of selected topics in public/community health under the supervision of a faculty member.

Prerequisites: Permission of the instructor

HLSC 701 Introduction to Health Services (3 Credit Hours)

HLSC 702 Health Management (3 Credit Hours)

This seminar will provide students with an understanding of health care organizations and effective management. Particular attention will be given to the issues of access, cost and quality.

HLSC 705 Interprofessional Study Abroad on Global Health (1-3 Credit Hours)

This study abroad service learning course will introduce the student to the political, social, cultural, and ethical issues involved in prevention and health promotion globally. Students will travel another country and learn the incidence/prevalence, morbidity/mortality, and identified public health problems in specific regions and countries.

HLSC 706 Leadership in Complex Systems and Organizations (3 Credit Hours)

This course will focus on the leadership that comprises two types: informal and formal leadership. Competencies will include communication, knowledge of health care environment, leadership, professionalism, and business skills.

HLSC 707 Informatics and Healthcare Technology (3 Credit Hours)

This course will cover the use of data in health care as well as other informatics applications. Students will explore healthcare technology used to improve the delivery and evaluation of care.

HLSC 708 Evidence-Based Management for Quality Healthcare (3 Credit Hours)

The focus of the course is on the development of system processes to ensure quality health care. The evidence-based model will be applied to organizational systems.

HLSC 709 Multidisciplinary Approach to Health Services Research (3 Credit Hours)

HLSC 710 Research Design and Application (3 Credit Hours)

HLSC 712 Qualitative Research Methods (3 Credit Hours)

HLSC 713 Measurement of Health Phenomena (3 Credit Hours)

An overview of measurement theory with emphasis on the development, testing, and refinement of norm- and criterion-referenced data collection instruments for health-related research.

HLSC 714 Theory in the Health Sciences (3 Credit Hours)

HLSC 716 Competitive Resource Design and Utilization (3 Credit Hours)

This course focuses on the competitive design and utilization of organizational and human resources. Emphasis will be placed on the strategic process to ensure that resources are applied in ways to ensure high-quality care and excellent patient outcomes. The course will cover the business models for effective financial and personnel management of healthcare organizations. Analysis of the costs and quality of care will be performed.

HLSC 746 Epidemiology (3 Credit Hours)

This course examines epidemiology as a method for viewing inborn community health problems and as a body of knowledge derived from this method. Skills in using epidemiology as a method and as knowledge to solve community health problems will be included.

HLSC 751 Developmental Neonatal Physiology (2 Credit Hours)

This course provides an in-depth examination of human genetics, embryologic development and normal physiologic functioning of developing body systems. Mechanisms involved in cell division, gametogenesis, and inheritance patterns will be addressed. Basic genetics and epigenetics will be included. The structural and functional development of fetal systems, during critical periods, will be emphasized. Abnormalities and alterations in fetal development will be explored.

HLSC 764 Health Economics (3 Credit Hours)

Lecture 3 hours; 3 credits. This course describes the application of economic tools to analyze the operation of markets for health care and insurance. Topics covered include the consumption and costs of health care in the United States, the viewpoints of players in the health care market, and an overview of both supply and demand analysis and cost effectiveness analysis. Complexities of economics unique to health care will be detailed. Further, students will employ these principles in several case studies of current and classic issues in health economics. (Cross-listed with CHP 764)

HLSC 768 Practicum in Global Health (2 Credit Hours)

Global health related field placement (112 hours).

HLSC 771 Foundations of Advanced Neonatal Care (3 Credit Hours)

The foundations of advanced neonatal care course provides the theoretical and practical knowledge for the neonatal nurse practitioner or physician assistant to manage the health care needs of the neonate in the newborn nursery or level II neonatal intensive care unit.

HLSC 772 Policy and Politics of Health (3 Credit Hours)

This course enables the student to develop a systematic and analytical framework for understanding health care policy issues. The policy process is covered in detail. Timely policy issues also are discussed.

HLSC 773 Pharmacology for Advanced Neonatal Care (3 Credit Hours)

This course offers scientific inquiry into the use of pharmacologic agents in the advanced nursing care of infants, including fetal, neonatal life, and early childhood. Pharmacokinetics, pharmacodynamics, drug use in pregnancy and lactation, pharmacologic agents used in disease prevention and treatment, drug monitoring and drug safety in the home are explored.

HLSC 774 Advanced Neonatal Care: High Risk Management I (3 Credit Hours)

This course develops the students' ability to manage high-risk neonates. This is the second of three sequential management courses that provide the theoretical and practical knowledge for the neonatal nurse practitioner to manage the health care needs of the neonate at the highest level of nursing practice.

HLSC 775 Advanced Neonatal Care: High Risk Management II (3 Credit Hours)

An organ systems approach is used to explore the diagnosis and management of neonates requiring surgery and advanced technologies. Additional topics will include developmental follow-up of the medically fragile infant and withdrawal of life support in the NICU.

HLSC 776 Global Health (3 Credit Hours)

This course will introduce the student to the political, social, cultural and ethical issues involved in disease prevention and health promotion globally. Specific emphasis will be on incidence/prevalence, morbidity/mortality, and identified health problems in specific regions and countries. This course will also identify international health prerogatives aimed at improving health status through education and intervention.

HLSC 778 Global Environmental Health (2-3 Credit Hours)

The goal of this course is to guide students with a public health perspective to develop skills to identify and analyze environmental health problems globally. It is designed to provide knowledge on recognizing and evaluating major environmental health issues and risk factors in developed and developing countries by using group discussions and real-life case studies.

HLSC 780 Monitoring & Evaluating Global Health Programs (2 Credit Hours)

This course familiarizes students with the basic concepts, issues, theories, approaches and models in evaluation in a global public health context. Students in this course will begin to develop technical skills to conceptualize and design evaluations of global public health programs or projects. These practices include determining which evaluation approach to use in a given context, developing an evaluation plan and appropriate evaluation questions, determining the data needed to answer the evaluation questions and establishing reporting processes to provide information to program developers.

HLSC 782 One Health, One Medicine (2 Credit Hours)

This course will teach students the applications of multidisciplinary competencies towards solving human health challenges. The course will identify all areas of global health issues that require human, veterinary and environmental applications for solutions. One Health One Medicine is an important course for all students in Health or Environmental Sciences that are called upon to integrate multidisciplinary competencies as part of their education and career experiences.

HLSC 784 Creating Sustainable Environmental Futures (3 Credit Hours)

This course examines the interrelationships between individual and societal decisions and the global environment, and analyzes the consequences these interrelationships have for public health and sustainability. The course will review food, environmental quality, climate variability, sea-level rise and public health, homes-workplaces-communities, and environmental health and sustainability in the region, the nation and around the world.

HLSC 785 Issues and Opportunities in Global Health Research (3 Credit Hours)

This course focuses on global health research with an emphasis on cultural, political and economic influences on health in various regions and provides students opportunities to engage in inter-professional teamwork to brainstorm problem-based issues and establish research proposals.

HLSC 795 Topics in Health Sciences (1-3 Credit Hours)

Designed to provide the advanced student with an opportunity to study independently or in small groups and investigate specific topics of current interest in health services or health sciences.

HLSC 798 Supervised Research (1-6 Credit Hours)

Supervised research on a specialized topic. Can be repeated.

HLSC 801 Introduction to Health Services (3 Credit Hours)

Focuses on the complexities involved in providing health services to populations. Presents issues related to public health, community health, urban and rural health, healthy people/communities and health care delivery in traditional and non-traditional settings.

HLSC 802 Health Management (3 Credit Hours)

This seminar will provide students with an understanding of health care organizations and effective management. Particular attention will be given to the issues of access, cost and quality.

HLSC 804 Methods of Program Evaluation (3 Credit Hours)

Examination of various methodologies for designing and conducting public health program evaluation and research. Experimental, quasi-experimental and non-experimental procedures will be covered. Departmental approval required.

Prerequisites: HLSC 810 or PAUP 853

HLSC 805 Interprofessional Study Abroad on Global Health (1-3 Credit Hours)

This study abroad service learning course will introduce the student to the political, social, cultural, and ethical issues involved in prevention and health promotion globally. Students will travel another country and learn the incidence/prevalence, morbidity/mortality, and identified public health problems in specific regions and countries.

HLSC 806 Leadership in Complex Systems and Organizations (3 Credit Hours)

This course will focus on the leadership that comprises two types: informal and formal leadership. Competencies will include communication, knowledge of health care environment, leadership, professionalism, and business skills.

HLSC 807 Informatics and Healthcare Technology (3 Credit Hours)

This course will cover the use of data in health care as well as other informatics applications. Students will explore healthcare technology used to improve the delivery and evaluation of care.

HLSC 808 Evidence-Based Management for Quality Healthcare (3 Credit Hours)

The focus of the course is on the development of system processes to ensure quality health care. The evidence-based model will be applied to organizational systems.

HLSC 809 Multidisciplinary Approaches to Health Services Research (3 Credit Hours)

Uses theory and research findings from areas such as Biology, Psychology, Sociology, Economics, Urban Studies, and Health Services to achieve an understanding of health services issues and problems. Emphasizes methods of analysis and of developing alternatives related to multidisciplinary perspectives.

HLSC 810 Research Design and Application (3 Credit Hours)

Emphasis is on exploring the advantages/disadvantages and uses of non-experimental, quasi-experimental, and experimental designs in health-related research with application to management, education, and clinical practice. (cross-listed with PT 810).

Prerequisites: graduate-level courses in research design and statistics or permission of the instructor

HLSC 811 Quantitative Research Methods in Health Care (3 Credit Hours)

An applied approach to the selection and application of bivariate and multivariate statistical techniques in health services research. Emphasis is placed on handling large data sets and the use of a computer for manipulation of quantitative data.

Pre- or corequisite: HLSC 710 or HLSC 810

HLSC 812 Qualitative Research Methods (3 Credit Hours)

An exploration of qualitative research methods including participant observation, ethnography and the generation of grounded theory. Individual interviews and focus group methods will be covered and historical, content analysis, phenomenological and montage approaches will also be discussed. Health related examples of published research in a variety of fields will be utilized to exemplify the methods.

HLSC 813 Health Outcomes Research (3 Credit Hours)

An overview of measurement theory with emphasis on the development, testing, and refinement of norm- and criterion-referenced data collection instruments for health-related research.

Prerequisites: graduate-level courses in research design and statistics or permission of the instructor

HLSC 814 Theory in the Health Sciences (3 Credit Hours)

Introduces the philosophy of science by studying the nature and purposes of theory for the health sciences. Standards for evaluation of theories will be described. Selected theories and supporting research from the health services literature will be discussed and critically evaluated.

HLSC 815 Decision Analysis in Health Care (3 Credit Hours)

This course teaches students the art and science of decision making. It covers expected utility theory, decision tree analysis, cost-benefit analysis, and the psychological aspects of the decision-making process in the context of health policy research.

HLSC 816 Competitive Resource Design and Utilization (3 Credit Hours)

This course focuses on the competitive design and utilization of organizational and human resources. Emphasis will be placed on the strategic process to ensure that resources are applied in ways to ensure high-quality care and excellent patient outcomes. The course will cover the business models for effective financial and personnel management of healthcare organizations. Analysis of the costs and quality of care will be performed.

HLSC 820 Health Care Delivery System (3 Credit Hours)

This course provides the student with an opportunity to analyze the American health care system. The health care system is composed of complex organizational dynamics and structures which predicate the interaction between the major components of the system: personnel who provide service; institutions in which care is provided; financing mechanisms which pay for care; and the government which attempts to regulate it. This course is designed for in-depth analysis and synthesis of all aspects of health care delivery with an emphasis on improving the delivery and access to care.

HLSC 846 Epidemiology (3 Credit Hours)

This course examines epidemiology as a method for viewing inborn community health problems and as a body of knowledge derived from this method. Skills in using epidemiology as a method and as knowledge to solve community health problems will be included.

HLSC 861 Advanced Quantitative Methods (3 Credit Hours)

This course adopts an applied approach to teaching health professions students the necessary competencies and skills in advanced quantitative methods. Topics include handling missing data, survey design and exploratory factor analysis, mediation and moderation analysis, and an introduction to confirmatory factor analysis and structural equation modeling (SEM).

Prerequisites: HLSC 811

HLSC 864 Health Economics (3 Credit Hours)

This course describes the application of economic tools to analyze the operation of markets for health care and insurance. Topics covered include the consumption and costs of health care in the United States, the viewpoints of players in the health care market, and an overview of both supply and demand analysis and cost effectiveness analysis. Complexities of economics unique to health care will be detailed. Further, students will employ these principles in several case studies of current and classic issues in health economics. (Cross-listed with CHP 764)

HLSC 868 Internship in Health Sciences (3 Credit Hours)

Supervised health services field experiences or health sciences laboratory experiences. A completed research project which is publishable or presentable at a professional conference is required to complete the course.

HLSC 872 Policy and Politics of Health (3 Credit Hours)

This course enables the student to develop a systematic and analytical framework for understanding health care policy issues. The policy process is covered in detail. Timely policy issues are also discussed.

HLSC 873 Planning Proposals and Developing Grants in Health Research (3 Credit Hours)

Designed as a 'hand-on' approach in effective grantsmanship, this course will guide the student from the identification of potential funding sources through proposal development. Highlights include program planning, nonprofit status, governmental/foundation corporate trends, local resources and grants administration.

HLSC 874 Administration in Health Sciences (3 Credit Hours)

This course will provide an overview of health delivery systems, organizational behavior, and theoretical foundations for managerial and executive leadership in health care facilities. Emphasis will be placed on utilizing best practices in leadership to promote motivation and quality improvement, strategic planning, information technology, and cultural awareness.

HLSC 875 Comprehensive Health Planning (3 Credit Hours)

This course emphasizes the principles and processes of program planning, including a consideration of objectives, priorities, policy choices, assessment of resources, implementation, and evaluation. The student will gain practical experience in program development by developing a planning document.

HLSC 876 Global Health (3 Credit Hours)

This course will introduce the student to the political, social, cultural and ethical issues involved in disease prevention and health promotion globally. Specific emphasis will be on incidence/prevalence, morbidity/mortality, and identified health problems in specific regions and countries. This course will also identify international health prerogatives aimed at improving health status through education and intervention.

HLSC 881 Dissertation Seminar (3 Credit Hours)

This course will assist students in developing a dissertation proposal. Steps in the research process will be reviewed as students submit drafts of their proposal for faculty and peer review. Problem formulation, integrating theoretical frameworks, preparing for human subjects review and outlining data analysis techniques for hypothesis testing will be discussed. Students will be introduced to University guidelines related to dissertations and other resources to assist them in their task.

HLSC 889 Colloquium I (1 Credit Hour)

This course is the first in a series of colloquial courses in which doctoral level students receive presentations and present research and current topics of interest in health related professions.

HLSC 890 Colloquium II (1 Credit Hour)

This course is the second in a series of colloquial courses in which doctoral level students receive presentations and present research and current topics of interest in health related professions.

HLSC 891 Colloquium III (1 Credit Hour)

This course is the third in a series of colloquial courses in which doctoral level students receive presentations and present research and current topics of interest in health related professions.

HLSC 892 Colloquium IV (1 Credit Hour)

This course is the fourth in a series of colloquial courses in which doctoral level students receive presentations and present research and current topics of interest in health related professions.

HLSC 895 Topics in Health Sciences (1-3 Credit Hours)

Designed to provide the advanced student with an opportunity to study independently or in small groups and investigate specific topics of current interest in health services.

Prerequisites: Ph.D. standing or permission of the graduate program director

HLSC 897 Independent Study (1-3 Credit Hours)

Individualized study selected by the student in collaboration with a faculty member. Area of study to be supervised and approved by a faculty member with the approval of the graduate program director.

Prerequisites: Admission to Health Services PhD program and permission of graduate program director

HLSC 898 Supervised Research (1-6 Credit Hours)

Supervised research on a specialized topic. Can be repeated.

HLSC 899 Dissertation (1-12 Credit Hours)

Available for pass/fail grading only. An approved research project written under the supervision of a faculty advisor, in which the student demonstrates the capacity to design and complete independent applied research. The completed project must be approved by the dissertation committee.

HLSC 999 Doctoral Graduate Credit (1 Credit Hour)

This course is a pass/fail course doctoral students may take to maintain active status after successfully passing the candidacy examination. All doctoral students are required to be registered for at least one graduate credit hour every semester until their graduation.

Master of Public Health (MPH)**MPH 610 Introduction to Public Health (1 Credit Hour)**

This introductory readings course provides students with an overview of the public health sector from a local, national, and global perspective. The history of public health and recent events leading to a complete transformation of service delivery are two of the topics presented.

MPH 611 Social and Behavioral Sciences for Public Health (3 Credit Hours)

This is a social and behavioral sciences core course for the MPH program. Psychological, social, and cultural concepts and models relevant to health and disease in society are reviewed and critiqued. Students will learn about different theoretical perspectives and how to apply appropriate social and behavioral models to public health programs. Students will learn how to select and apply appropriate social and behavioral models to the design of public health interventions and policies. The course will also cover existing social inequalities in health status related to race/ethnicity, social class, and gender, and the critical intersection between social risk factors, behavioral risk factors, and the development and implementation of public health interventions. Social ecological models that influence population health at multiple levels are emphasized.

MPH 612 Statistical Reasoning for Public Health (3 Credit Hours)

This course is designed for student majoring in public health and health-related disciplines. The course introduces basic concepts in biostatistics and fundamental methods in statistical analysis. Although formulae and computational elements will be incorporated into the lecture, the course is designed to teach students how to make informed decisions from a given set of data collected from a health research study. This process includes exploring data, reviewing all the underlying statistical assumptions, summarizing and analyzing the data using common descriptive and inferential statistical methods, and finally reporting and interpreting the statistical results. Students will utilize statistical software to perform data analysis and answer research questions. The overall goal of this course is to assist students to develop a process for critical statistical thinking that is important in many areas of scientific research.

MPH 613 Environment, Society, and Health (3 Credit Hours)

This course provides an introduction to 21st century environmental health science. In addition to covering some of the traditional environmental factors affecting the health of individuals and communities in the region, the nation, and around the world, the class familiarizes students with a broad range of contemporary and emerging environmental health challenges and issues. In addition, through a series of guest presentations by experienced practitioners in the field, the course introduces students to the "real world" of environmental health practice.

MPH 615 Systems Thinking and Health Management (3 Credit Hours)

Students will learn the practice of systems thinking, which includes the ability to integrate multiple perspectives and synthesize them into a framework or model that encompasses the various ways in which a system might react to policy choices.

MPH 616 Research Methods in Public Health (3 Credit Hours)

This is a foundational course in research methods that will provide an overview of the basic principles of research design, methods, measurements, data collection and data management in the field of public health. Students will learn the differences between quantitative, qualitative and mixed methods approaches to public health research, as well as how to formulate and evaluate research questions. The overall goal of this course is to provide practical, step-by-step guidance to the research process under the scientific method framework.

Prerequisites: MPH 612 and HLSC 746

MPH 622 Environmental Health Law, Justice and Governance (3 Credit Hours)

This course surveys the basic legal concepts affecting environmental health services and program enforcement and administration. It is designed to provide a fundamental background of environmental and public health law for public health officers and other environmental health workers to fulfill their respective roles more successfully. Workplace occupational health and safety will not be addressed in depth in this course.

Pre- or corequisite: MPH 613

MPH 630 Health Communication and Social Marketing for Public Health (3 Credit Hours)

This course aims to provide students with a critical understanding of how social marketing offers a useful approach to address a variety of public health problems. It will emphasize social marketing within a broader strategic health communication framework. Students will learn how social marketing and strategic health communication can be applied effectively to address public health issues and how to design effective health communication programs.

Pre- or corequisite: MPH 611

MPH 632 Environmental and Occupational Health Risk Assessment (3 Credit Hours)

This course is an introduction to risk assessment, as applied to environmental and workplace hazards. It examines the fundamental concepts of risk. Students will learn the United States Environmental Protection Agency (USEPA) standard and advanced methodology for quantitative risk assessment including hazard identification, exposure assessment, dose-response modeling, risk characterization, and risk communication. Utilization of qualitative assessment methods and ecological risk assessment are also explored.

Pre- or corequisite: MPH 613

MPH 640 Health Disparities and Social Justice (3 Credit Hours)

This course provides an introduction to the topic of global health disparities through an in-depth examination and discussion of the relationship between social injustice and inequitable health outcomes. Students will be introduced to the social and environmental determinants of health disparities and the pathways and mechanisms leading to inequitable health outcomes in vulnerable groups, as well as strategies for addressing these determinants to improve health.

Pre- or corequisite: MPH 611

MPH 643 Principles of Toxicology (3 Credit Hours)

An introduction to the fundamentals of toxicology with emphasis on the interaction of environmental and industrial chemicals with humans are studied. Exposure, dose response, kinetics and distribution of toxicants, metabolism of toxic agents, factors that affect toxicity and introductory chemical carcinogenesis are discussed.

MPH 651 Health Promotion Theory and Practice (3 Credit Hours)

This course provides students with a comprehensive overview of the practical and theoretical principles and skills needed to plan, implement, and evaluate health promotion programs in a variety of settings. The course will help students apply constructs from theories to understand the determinants of health behaviors and emphasizes the importance of addressing health behavior change at the individual, interpersonal, organizational, community and societal levels of the social ecological model.

Pre- or corequisite: MPH 611

MPH 661 Program Planning and Evaluation (3 Credit Hours)

This course provides public health graduate students with a comprehensive overview of the practical and theoretical principles and skills needed to plan, implement, and evaluate health programs in a variety of settings.

Pre- or corequisite: MPH 611

MPH 669 Applied Practice Experience (1-3 Credit Hours)

This course provides students with an opportunity to engage in public health practice in the community or in a working environment. Applied practice experience (APE) is based on applied learning, problem-based and competency-linked activities. Students gain competence in public health practice relevant to the concentration area selected. The applied learning will require students to complete a project related to an actual public health issue that is a focus within a specific organization.

Pre- or corequisite: Approval of Practicum Director and/or Program Director

MPH 670 Applied Mixed-Methods Research in Health Promotion (3 Credit Hours)

Examines multicultural consideration across health promotion and public health domains, and developing a culturally sensitive and effective plan for health behavior change using mixed-methods research.

MPH 688 Grant Writing for Public Health Practice (3 Credit Hours)

This course covers issues and problems concerned with the development of grants and contracts as they relate to the health professions. The course focuses on the multiple roles of funding agencies and the importance of matching the interests of the grant seeker with the corresponding funding agency

MPH 689 Integrative Learning Experience (1-3 Credit Hours)

This is the culminating course for the MPH program. Students demonstrate an ability to integrate and synthesize foundational and concentration-specific competencies from their MPH program coursework. Students complete assignments that address timely public health issues culminating in high quality written products and an e-portfolio that demonstrate the analysis, synthesis and intersection of course work and concurrent practicum experiences. Students from all tracks are required to complete this course prior to graduation.

MPH 712 Applied Biostatistics (3 Credit Hours)

This course presents modern methods for analyzing data from epidemiologic and public health studies using the latest statistical methods. Emphasis will also be placed on technical and statistical report writing.

Pre- or corequisite: Satisfactory academic performance with B or above in MPH 746, MPH 612 and MPH 616 or approval from instructor or program director

MPH 713 Applied Statistical Programming (3 Credit Hours)

This course covers programming and computing techniques using contemporary statistical packages. Emphasis is placed on practical issues relating to organizing, modifying, and preparing data for analysis.

Pre- or corequisite: Satisfactory academic performance with B or above in MPH 746, MPH 612 and MPH 616 or approval from instructor or program director

MPH 716 Application of Epidemiological Methods (3 Credit Hours)

The course aims to prepare students with hands-on experience in producing common epidemiological measures while critically evaluating the quality of data and the design of epidemiological investigations.

Pre- or corequisite: Satisfactory academic performance with B or above in MPH 746, MPH 612 and MPH 616 or approval from instructor or program director

MPH 717 Epidemiology of Infectious Diseases: (3 Credit Hours)

This course focuses on the epidemiology of infectious diseases from a public health perspective. It applies traditional and contemporary epidemiological methods used to deal with infectious diseases.

Pre- or corequisite: Satisfactory academic performance with B or above in MPH 746, MPH 612 and MPH 616 or approval from instructor or program director

MPH 746 Epidemiology (3 Credit Hours)

This course examines epidemiology as a method for viewing inborn community health problems and as a body of knowledge derived from this method. Skills in using epidemiology as a method and as knowledge to solve community health problems will be included.

MPH 761 Advanced Quantitative Methods (3 Credit Hours)

This course adopts an applied approach to teaching health professions students the necessary competencies and skills in advanced quantitative methods. Topics include handling missing data, survey design and exploratory factor analysis, mediation and moderation analysis, and an introduction to confirmatory factor analysis and structural equation modeling (SEM).

Pre- or corequisite: MPH 612 and MPH 746

MPH 776 Global Health (3 Credit Hours)

This course will introduce the student to the political, social, cultural and ethical issues involved in disease prevention and health promotion globally. Specific emphasis will be on incidence/prevalence, morbidity/mortality, and identified health problems in specific regions and countries. This course will also identify international health prerogatives aimed at improving health status through education and intervention.

MPH 778 Global Environmental Health (3 Credit Hours)

The goal of this course is to guide students with a public health perspective to develop skills to identify and analyze environmental health problems globally. It is designed to provide knowledge on recognizing and evaluating major environmental health issues and risk factors in developed and developing countries by using group discussions and real-life case studies.

Pre- or corequisite: MPH 613

MPH 784 Creating Sustainable Environmental Futures (3 Credit Hours)

This course examines the interrelationships between individual and societal decisions and the global environment, and analyzes the consequences these interrelationships have for public health and sustainability. The course is organized into four in-depth modules: (1) toxic substances and environmental disasters, (2) food, sustainability, environmental quality and health, (3) climate, sea-level rise and public health, and (4) communities, sustainability and health. Students engage in an extensive examination of each area, analyze the public health implications, and consider various strategies for improving individual and population health, and enhancing sustainability, in the local area, the region, the nation and around the world.

Master of Public Health (MPHO)**MPHO 600 Introduction to Public Health Practice (1 Credit Hour)**

This course provides an introduction to the multidisciplinary field of public health. Students will learn the history, core functions, and roles of the US public health system through grounding in the 12 foundational public health knowledge areas.

MPHO 605 Introduction to Biostatistics for Public Health (3 Credit Hours)

This course introduces fundamental concepts in biostatistics. Students will learn how to analyze and interpret numeric data using statistical tools to investigate and evaluate public health issues.

MPHO 608 Environment and Public Health (3 Credit Hours)

This course provides an introduction to 21st century environmental health science and practice. In addition to covering foundational environmental issues affecting people's health, the class familiarizes students with contemporary environmental health challenges such as climate change, sea level rise, antibiotic resistance, food and sustainability, plastics and environmental health, disaster preparedness, lead poisoning, radiation safety and health, environmental justice, cultural competence, and environmental risk communication.

MPHO 610 Introduction to Public Health Practice (1 Credit Hour)

This introductory readings course provides students with an overview of the public health sector from a local, national, and global perspective. The history of public health and recent events leading to a complete transformation of service delivery are two of the topics presented.

MPHO 611 Social and Behavioral Sciences for Public Health (3 Credit Hours)

This course reviews and critiques psychological, social, and cultural concepts and models relevant to health and disease in society. Students will learn how to select and apply appropriate social and behavioral models to the design of public health interventions and policies. Existing social inequalities in health status related to race, social class, and gender will be explored, as will the intersection between risk factors and the development/implementation of public health interventions.

MPHO 613 Environmental Sciences for Public Health Practice (3 Credit Hours)

This course provides an introduction to the chemical, physical, and biological factors affecting human health and well-being. The application of controls to prevent disease and maximize environmental quality is emphasized.

MPHO 614 Principles of Epidemiology (3 Credit Hours)

This course will introduce the principles and basic methods of epidemiology for applications in public health. These include measures of disease frequency and association, study design, sources of errors in epidemiological studies, validity and reliability of diagnostic and screening tests, causation, and outbreak investigations.

MPHO 616 Research Methods in Public Health (3 Credit Hours)

Public health professionals require skills to identify problems that face population groups, and to delineate ways to solve them. Often this necessitates conducting small- or large-scale investigations on their own, or as a member of a project team. The goal of this course is to provide practical, step-by-step guidance to the research process in public health.

MPHO 620 Health Management and Systems Thinking (3 Credit Hours)

In this course, students will review the structure and functions of American and international healthcare systems, public health practice, and managerial responsibilities. Additionally, this course will introduce students to the practice of systems thinking in public health and the influence of systems thinking on public health policy.

MPHO 622 Environmental Health Law, Justice and Governance (3 Credit Hours)

This course surveys the basic legal concepts affecting environmental health services and program enforcement & administration. It is designed to provide a fundamental background of environmental and public health law for public health officers and other environmental health workers to fulfill their respective roles more successfully.

MPHO 630 Health Communication and Social Marketing for Public Health (3 Credit Hours)

This course examines social marketing concepts and tools for influencing health behavior change. Students learn how to design, implement, and evaluate strategies for social marketing campaigns.

MPHO 632 Environmental and Occupational Health Risk Assessment (3 Credit Hours)

This course is an introduction to risk assessment, as applied to environmental and workplace hazards. It examines the fundamental concepts of risk. Students will learn the United States Environmental Protection Agency (USEPA) standard and advanced methodology for quantitative risk assessment including hazard identification, exposure assessment, dose-response modeling, risk characterization, and risk communication. Utilization of qualitative assessment methods and ecological risk assessment are also explored.

MPHO 633 Financing Healthcare (3 Credit Hours)

Students will examine financial evaluation of the health care industry, the source of funds, and the effects of changing patient policies. Other topics of interest will be financial strategies, budgets and capital outlay. Cross-listed with CHP 633.

MPHO 640 Health Disparities and Social Justice (3 Credit Hours)

This course provides an introduction to the topic of global health disparities through an in-depth examination and discussion of the relationship between social injustice and inequitable health outcomes. Students will be introduced to the behavioral, social and environmental determinants of health disparities and the pathways and mechanisms leading to inequitable health outcomes in vulnerable groups, as well as strategies for addressing these determinants to improve health.

MPHO 643 Principles of Toxicology (3 Credit Hours)

This course is an introduction to the basic principles of toxicology, and the interactions between toxic agents and living systems. The course consists of a study of general principles, dose response, toxin recognition and evaluation, chemicals, the human environment, and ecological toxicology.

MPHO 651 Health Promotion Theory and Practice (3 Credit Hours)

This course provides public health promotion graduate students with a comprehensive overview of the practical and theoretical principles and skills needed to plan, implement, and evaluate health promotion programs in a variety of settings. The course will help students apply constructs from theories to understand the determinants of health behaviors and emphasizes the importance of addressing health behavior change at the individual, interpersonal, organizational, community and societal levels of the social ecological model.

MPHO 660 Healthcare Informatics (3 Credit Hours)

This course examines the availability, use of interpretation of data obtained from traditional and new data systems used for population health monitoring. Included are public health surveillance systems, vital statistics, hospital discharge data, Health Plan Employer Data and Set (HEDIS), immunization information, school health data, 1996 Health Insurance Portability and Accountability Act (HIPAA), and regulatory agency data related to health.

MPHO 661 Program Planning and Evaluation (3 Credit Hours)

This course provides public and community health graduate students with a comprehensive overview of the practical and theoretical principles and skills needed to plan, implement, and evaluate health programs in a variety of settings.

MPHO 669 Applied Practice Experience (3 Credit Hours)

In this course, students build on their earlier practice activities (i.e., Practice Labs) and undertake an extensive, hands-on activity at a field-based practice site. The Practice Labs, which are completed prior to taking this course, are designed to meet foundational and track competencies as well as prepare students for an on-site work experience.

MPHO 670 Cultural Issues in Health Promotion and Education (3 Credit Hours)

This course provides an introduction for multicultural communication for health promotion and disease management. Topics to be covered include how to work collaboratively in diverse groups with an understanding of health behaviors, values, and health benefits.

MPHO 673 Policy and Politics of Health (3 Credit Hours)

This course enables the student to develop systematic and analytical frameworks for understanding health and healthcare policy issues. It will introduce the policy process, background research necessary for policy implementation, and implementation strategies.

MPHO 680 Global Health Issues (3 Credit Hours)

An examination of the political, social, cultural, and ethical issues for disease prevention and health promotion in developing countries. Students will learn to identify international health prerogatives aimed at improving health status through education and intervention.

MPHO 686 Legal Aspects of Health Services (3 Credit Hours)

This course examines the legal requirements affecting the health care industry, including a survey of the basic concepts and content in the major areas of health law, an explanation and identification of sources of legal authority, and a familiarity with legal language.

MPHO 688 Grant Writing for Public Health Practice (3 Credit Hours)

This course covers issues and problems concerned with the development of grants and contracts as they relate to the health professions. The course focuses on the multiple roles of funding agencies and the importance of matching the interests of the grant seeker with the corresponding funding agency.

MPHO 689 Integrative Learning Experience (3 Credit Hours)

This is the culminating course for the MPH program. Students demonstrate an ability to integrate and synthesize foundational and concentration-specific competencies from their MPH program coursework. Students complete assignments that address timely public health issues culminating in high quality written products and an e-portfolio that demonstrate the analysis, synthesis and intersection of course work and concurrent practicum experiences. Students from all tracks are required to complete this course prior to graduation.

MPHO 695 Topics in Public Health (1-3 Credit Hours)

MPHO 712 Applied Biostatistics (3 Credit Hours)

This course presents modern methods for analyzing data from epidemiologic and public health studies using the latest statistical methods. Emphasis is placed on practical, applied theories/concepts, aspects of methods for the analysis of diverse types of data including from observational studies, and the use of a computer for quantitative data management. Emphasis will also be placed on technical and statistical report writing.

MPHO 713 Applied Statistical Programming (3 Credit Hours)

This course covers programming and computing techniques using contemporary statistical packages. Emphasis is placed on practical issues relating to organizing, modifying, and preparing data for analysis.

MPHO 716 Application of Epidemiological Methods (3 Credit Hours)

The course aims to prepare graduate students with hands-on experience in producing common epidemiological measures while critically evaluating the quality of data and the design of epidemiological investigations.

MPHO 717 Epidemiology of Infectious Diseases (3 Credit Hours)

This course focuses on the epidemiology of infectious diseases from a public health perspective. It applies traditional and contemporary epidemiological methods used to deal with infectious diseases.

MPHO 776 Global Health (3 Credit Hours)

This course introduces students to the political, social, cultural, environmental, and ethical issues globally involved in disease prevention and health promotion. Specific emphasis is on incidence/prevalence, morbidity/mortality, and identified health problems in specific regions and countries. This course also identifies global health prerogatives aimed at improving health status through education and intervention.

MPHO 778 Global Environmental Health (3 Credit Hours)

The goal of this course is to guide students with a public health perspective to develop skills to identify and analyze environmental health problems globally. It is designed to provide knowledge on recognizing and evaluating major environmental health issues and risk factors in developed and developing countries by using group discussions and real-life case studies.

MPHO 784 Creating Sustainable Environmental Futures (3 Credit Hours)

This second-year MPH course examines the interrelationships between individual and societal decisions and the global environment, and the consequences these interrelationships have for public health. Students engage in an in-depth examination of key environmental health issues, analyze the public health implications, and consider various strategies for improving individual and population health, and enhancing sustainability, in the local area, the region, the nation and around the world.