This course examines the philosophy and process of conducting health research for the purposes of protecting the health of the public. Public health research is responsible for many of the laws, policies, and best practices that guide how we prevent disease. Public health research moves beyond conjecture and opinion to provide sound evidence about the risks of ill health and disease. The course employs a series of case studies to evaluate evidence, make sense of correlations, and understand the risks of disease.

**MPH 502 | INTRODUCTION TO EPIDEMIOLOGY | 4 quarter hours**  
(Graduate)

This course will focus on the theories and methods used in the field of epidemiology to study the occurrence, distribution and determinants of infectious and non-infectious diseases, other forms of illness (particularly those impacted by social and environmental forces), and injury in human populations. The focus will be on determining the impact, magnitude, and patterns of disease/illness/injury frequency so that causal agents can be identified and effective prevention, treatment and control measures can be designed and implemented. The course will explore variations of disease/illness/injury in relation to such factors as age, sex, race/ethnicity, occupational and social characteristics, place of residence, social inequality, susceptibility, exposure to specific agents, and other pertinent characteristics. Also of concern will be the temporal distribution of disease, examination of trends, cyclical patterns, and intervals between exposure to causative factors and onset of disease.

**MPH 503 | INTRODUCTION TO ENVIRONMENTAL HEALTH | 4 quarter hours**  
(Graduate)

Study of the environment factors that influence health. Topics include air and water pollution, global population and local community dynamics, toxicology, infectious and chemical agents, radiation, and management.

**MPH 511 | HEALTH AND BEHAVIOR THEORY | 4 quarter hours**  
(Graduate)

This course will examine various theories and models that have been developed to identify the range of psychosocial factors that impact participation in both health-threatening and health-enhancing behaviors, and provide guidance for the modification of such behaviors. The theories and models will be explored from multidisciplinary perspectives and will be applied to an array of health issues. Practical applications of these theories to the development and implementations of theory-based public health interventions that can be applied with multiple populations (e.g., women, adolescents, elderly, people of color) within multiple settings (e.g., communities, schools, health care settings) at various levels of change (e.g., individual, community, social, policy) will also be explored. Cross-listed with PSY 511.

**MPH 512 | RESEARCH METHODS | 4 quarter hours**  
(Graduate)

This course will provide a critical examination of the relative strengths and limitations of various research designs, data collection methods, and types of existing data. Students will develop an understanding of (a) the relative contributions of a mixed-methods approach to public health research, (b) basic issues related to the measurement of public health concepts, and (c) the relative strengths and limitations of various analytic approaches to studying public health problems. Students will familiarize themselves with peer-reviewed journals, how to search for material on specific topics, how to develop a critical reader’s eye, and how to summarize and draw evidence-based conclusions from multiple studies.

**MPH 513 | PUBLIC HEALTH ADMINISTRATION | 4 quarter hours**  
(Graduate)

This course considers the conceptual and theoretical foundation underlying managerial decision-making. The course introduces students to such basic managerial tools as basic accounting, cost-benefit analysis, budgeting, and marketing. Principles of strategic planning and forecasting are examined. The course goes on to examine the legal framework that governs public health practice, organizations, human resources, research activities, and community as well as individual patient intervention efforts.

**MPH 515 | PUBLIC HEALTH ETHICS AND POLICY | 4 quarter hours**  
(Graduate)

This course is designed to analyze the ethical basis in which public health practice is grounded. It reviews concepts and ideas developed by a number of disciplines including philosophy, law, political science, and economics.

**MPH 522 | PROGRAM DEVELOPMENT AND GRANT WRITING | 4 quarter hours**  
(Graduate)

This course is designed to provide students with the background and skills to develop and evaluate community public health programs in a variety of settings. Students will work individually and as members of teams to design measurable goals, objectives, action plans, timelines, and evaluation indicators of community-based public health programs. Application of methods to logic modeling, proposal writing, budget planning, project management, and data management will be examined throughout the course.
MPH 525 | PROGRAM EVALUATION | 4 quarter hours  
Graduate  
This course will provide students with a comprehensive theoretical, methodological and ethical foundation for conducting public health program evaluation. Students will experience the practice aspects of evaluation including communicating and negotiating with stakeholders, conducting an evaluator assessment, developing logic models and evaluation questions, identifying appropriate data collection methods, gathering reliable and valid evaluation data that are appropriate to the selected design and analysis methods, analyzing data, reporting evaluation results, and ensuring evaluation use. The instructor will facilitate a learning and skill-building environment, drawing on personal experiences and the expertise of others in the field.

MPH 530 | SOCIAL EPIDEMIOLOGY | 4 quarter hours  
Graduate  
This course examines conceptual approaches and empirical findings related to the social and structural determinants of health. Students are introduced to the history and development of social epidemiology as a field of study, with emphasis on the tension between problem-focused and solution-focused research. Topics include the health effects of income inequality, racism/discrimination, and neighborhood effects, including social capital.

MPH 531 | DATA ANALYSIS | 4 quarter hours  
Graduate  
This course explores how statistical methods are used in the contemporary literature, focusing for the most part on social epidemiology. The course builds from an understanding of univariate and bivariate statistics and examines a range of multivariate strategies: ordinary least squares (OLS) regression, logistic, ordinal, and multinominal models, and hierarchical (multilevel) regression. The course revolves around a close reading of the research literature and hands-on application of statistical analysis; as such, the emphasis is on critically evaluating published work and setting up/interpreting analyses. MPH 541 and MPH 502 (or instructor consent) are prerequisites for this class.

MPH 532 | DATA ANALYSIS II | 4 quarter hours  
Graduate  
This course focuses primarily on regression models, with an emphasis on understanding the effects of compositional and contextual variables. Students develop statistical analysis to test theories and aid in the development of interventions to improve community health and reduce health inequities. MPH 531 is a prerequisite for this course.

MPH 535 | PROGRAM DESIGN AND EVALUATION | 4 quarter hours  
Graduate  
This course will provide a theoretical, conceptual, methodological, and ethical foundation for designing health-based programs and evaluating these programs using qualitative methods. The course will be practically-focused, and you will learn to carry out a qualitative evaluation of a health program in small steps, including: selecting a qualitative approach, developing instruments, sampling, collecting and managing qualitative data, developing codebooks and establishing inter-observer reliability, ensuring credibility and trustworthiness of data, using qualitative software, and reporting findings.

MPH 541 | BIOSTATISTICS | 4 quarter hours  
Graduate  
This course emphasizes the application of statistical methods to problems of human health and disease. It covers parametric and nonparametric statistical inferential methods for univariate and bivariate situations using SPSS. Specific topics include but are not limited to the following: Interpretation of graphic and descriptive statistics for both quantitative and categorical data, confidence interval estimation and hypothesis testing methods, linear and multiple regression logistic regression, analysis of categorical data and ANOVA. Course emphasizes the statistical interpretation of the literature and analytic projects based on large data sets from published studies, the internet, or the student's workplace.
MPH 555 | EPIDEMIOLOGY IN A GLOBAL CONTEXT | 4 quarter hours  
(Graduate)  
This course will focus on the theories and methods used in the field of epidemiology to study the occurrence, distribution and determinants of infectious and non-infectious diseases, other forms of illness (particularly those impacted by social and environmental forces), and injury in human populations. The class examine epidemiology in various global contexts. The focus will be on 95 determining the impact, magnitude, and patterns of disease/illness/injury frequency so that causal agents can be identified and effective prevention, treatment and control measures can be designed and implemented. The course will explore variations of disease/illness/injury in relation to such factors as age, sex, race/ethnicity, occupational and social characteristics, place of residence, social inequality, susceptibility, exposure to specific factors, and other pertinent 100 characteristics. Also of concern will be the temporal distribution of disease, examination of trends, cyclical patterns, and intervals between exposure to causative factors and onset of disease.

MPH 556 | WOMEN'S HEALTH | 4 quarter hours  
(Graduate)  
An examination of women's health throughout the life cycle, with special emphasis placed on women's structural and societal roles within systems of health and in communities at large, which emphasizes ongoing and emerging issues in women's health, such as sexual and reproductive health, contraception, gender-based violence, and chronic diseases, in order to address health disparities and redress health inequalities.

MPH 557 | ENVIRONMENTAL EPIDEMIOLOGY | 4 quarter hours  
(Graduate)  
Environmental epidemiology is the science of identifying the role the environment has on the distribution of chronic and infectious disease. In this course, students will learn the practical techniques to identify health disparities and the associated environmental factors including the physical, chemical, biological, and socio-cultural determinants of health. Specific topics will include risk assessment, exposure estimation, and epidemiological study design demonstrated through case study analysis, critical review of the literature, data collection, and interpretation.

MPH 558 | QUALITATIVE METHODS IN PUBLIC HEALTH | 4 quarter hours  
(Graduate)  
This course introduces students to the theory and application of qualitative inquiry. The course covers a variety of qualitative approaches including depth interviewing, focus groups, and photovoice. It also guides students through the process of designing a qualitative study, including: developing data collection instruments, managing data collection, analyzing qualitative data, and disseminating findings.

MPH 559 | VIOLENCE AND PUBLIC HEALTH | 4 quarter hours  
(Graduate)  
This course explores violence from a public health perspective. It will examine various forms of violence, including: Interpersonal violence (e.g., community, family/partner violence), self-inflicted violence (e.g., suicide and self-harm) and collective violence (e.g., social violence and structural violence). It will also examine theories to explain violence and public health policies, programs, and community-based practices to address and prevent violence.

MPH 595 | SPECIAL TOPICS IN PUBLIC HEALTH | 4 quarter hours  
(Graduate)  
Special courses will be offered as students and faculty affiliated with the MPH program identify selected topics of common interest.

MPH 599 | INDEPENDENT STUDY IN PUBLIC HEALTH | 1-4 quarter hours  
(Graduate)  
This course can be taken in consultation with a supervising faculty member.

MPH 600 | PREPARATION FOR PUBLIC HEALTH PRACTICE | 1 quarter hour  
(Graduate)  
This year-long course includes a series of skills-based workshops designed to introduce students to the specialized skills and competencies needed in the public health workplace. These workshops are designed to complement the core MPH curriculum and are selected based on regular feedback from faculty, public health practitioners, and students.

MPH 602 | COMMUNITY HEALTH ASSESSMENT | 4 quarter hours  
(Graduate)  
This course is the second of a three-course sequence. Students are expected to assess and incorporate findings from their community health profile and organizational assessment to design a public health project plan that meets the needs of the community served by their practicum agency, and to further develop the academic capstone. MPH 602 is a prerequisite for this course.

MPH 603 | COMMUNITY HEALTH PROJECT DESIGN | 4 quarter hours  
(Graduate)  
This is the second course of the three-course sequence. Students are expected to describe and distill outcomes from their community health profile and organizational assessment to design a public health project plan that meets the needs of the community served by their practicum agency, and to further develop the academic capstone. MPH 602 and MPH 603 are prerequisites for this class.

MPH 604 | CAPSTONE SEMINAR IN COMMUNITY PUBLIC HEALTH | 4 quarter hours  
(Graduate)  
This is the third course of the three-course sequence. Students are expected to describe and distill outcomes from their practicum project, and synthesize the meaning of these outcomes within a broader public health context. They will produce the final chapters of the academic capstone, submit the finalized capstone for review, and create a professional poster presentation. MPH 602 and MPH 603 are prerequisites for this class.

MPH 605 | SOCIAL EPIDEMIOLOGY PROJECT DESIGN | 4 quarter hours  
(Graduate)  
This course is the first part of a three-course capstone sequence. This course focuses on the first two parts of the capstone and is designed to provide the student with the practical experience needed to apply skills learning in Social Epidemiology to the practice of Community Health Assessment and Organizational Assessment. MPH 600 is a prerequisite for this course.
MPH 606 | SOCIAL EPIDEMIOLOGY PROJECT IMPLEMENTATION | 4 quarter hours
(Graduate)
This class examines the practical application of social sciences theories to the creation of effective epidemiological analysis and the presentation of findings. Using your practicum as a framework, we examine the scientific literature to assess current best practices and benchmarks for your proposed capstone product through a systematic review of the literature. We apply this scholarly knowledge, in concord with your work for MPH 605, to craft and conduct an appropriate epidemiological analysis for your capstone. We will review the analytical tools needed in the capstone and we will identify techniques to disseminate the findings of the project in a comprehensive, concise, and appropriate results section.

MPH 605 is a prerequisite for this course.

MPH 607 | CAPSTONE SEMINAR IN SOCIAL EPIDEMIOLOGY | 4 quarter hours
(Graduate)
This is the third course of the three-course capstone sequence. This course focuses on the final production of the capstone and poster presentation at the MPH Graduate Public Health Forum. The capstone demonstrates students? ability to integrate knowledge and skills obtained throughout their MPH training and practicum placement to a social epidemiology issue and setting -- and to express this integration in two structured, academic formats: capstone and poster.

MPH 606 is a prerequisite for this course.

MPH 698 | CAPSTONE THESIS COMPLETION | 0 quarter hour
(Graduate)
Students may register for this class if they are engaged in work on their capstone thesis. Registration requires certification by the chair that the student is engaged in writing. The course does not apply to completion of an IN in a class. This is a zero-credit course.

MPH 699 | PUBLIC HEALTH PRACTICUM | 1 quarter hour
(Graduate)
Students placed in practicum are required to enroll in MPH 699, Pass/ Fail course. MPH 699 is a year-long course with no in-person class time. However, the course D2L site serves as the centralized location for practicum paperwork, portfolio submissions, hour counts, and the coordination of practicum-related administrative matters. Students are required to successfully complete MPH 699 to be eligible for degree conferral.

MPH 600 is a prerequisite for this course.