

### Core/Required Course Descriptions

Biostatistics I	This introductory course features biostatistical concepts, principles, and methods used in public health and biomedical science disciplines. Taught as part of the core curriculum for all students in Master of Science in Public Health, the major goal of this course is to enable students to acquire relevant knowledge and skills applicable to public health research and practices. Specific topics include methods for describing central tendency and variability in data; and performing inference and hypothesis testing on population mean and proportion differences.
Epidemiology I	Epidemiology I (Introductory) – This course is designed to explore principles of investigating the differential distribution of disease among population groups, provide exercises demonstrating epidemiologic techniques and introduce students to the use of data to treat and prevent disease and evaluate health care effectiveness. 3 credit hours.
Foundations in Public Health	This hybrid course introduces public health theory and concepts, describing the scientific foundation of public health. It examines the purpose, history, organization, functions, activities, and outcomes of public health practice at the global, national, state, and local community levels. Prominent historical events of public health and current day debates will open the student to the evolution of public health. This course provides an overview of the cornerstones of public health: epidemiology, biostatistics, environmental health, behavioral and community health and health policy. At the conclusion of this course, the successful student will have an appreciation for public health theoretical concepts and the foundations by which public health cultivated into the comprehensive, applied health field it is today.
Research Design	This course is designed as an overview of research design and methodology with specific attention to individual student needs as related to the completion of the thesis.
Public Health Practice	This class intends to help students translate public health in the classroom, to public health as it is practiced in the public and private sectors. Students will sharpen the soft skills needed to work in the community and organizations, as well as develop a clear understanding of the elements of prevention and intervention. The class is the prerequisite for the Applied Practice Experience, field placement where students join units in various disciplines to affect health and wellbeing through the integration of acquired skills and competencies.
Health Behavior	The purpose of this course is to introduce the application of the social and behavioral sciences to health. Emphasis will be placed on (1) how theories, empirical research, findings, and methodologies of psychology, sociology, and anthropology apply to health issues, and (2) the major social and cultural determinants of health-related behavior.
Health Administration and Planning	This course introduces the basic principles, concepts, and theories of management in the context of the health care delivery system. It emphasizes the facts, problems, and issues of health care administration at all levels of the delivery system.

**Core/Required Course Descriptions, continued**

Data Management	An introduction to principles needed for processing large data files. Subject material will cover editing, encoding, structuring, and manipulating data, as well as timing considerations. Use will be made of the data processing computing equipment at Meharry Medical College.
Environmental Health	This course is designed to survey those factors that impact upon the environment and human health. The student will be provided a conceptual framework for the study, analysis and control of various environmental problems.
Applied Practice Experience (APE)	The application of skills gained in the class to actual health agency and community programs. Students will identify and solve real health problems in communities, operating agencies, local and state governments, etc. Prerequisite: Public Health Practice
Integrated Learning Experience (ILE)	The Integrated Learning experience (ILE) is an opportunity for MSPH students to synthesize and integrate knowledge acquired in coursework and other learning experiences and to apply theory and principles in a situation that approximates some aspect of professional public health practice.

### MSPH Electives

Epidemiology II	This advanced course deals with epidemiology theory and methods in the actual study of disease etiology with particular emphasis upon case control study methods including matching, confounding and selection techniques. Prerequisite: MSPH 70001 Epidemiology I.
Biostats II	This course deals with statistics required for the analysis of medical care data. It covers further techniques for the application of statistical theory to actual data, combining lectures with computational experience. Emphasis will be placed upon the analysis of variance (ANOVA), linear and multiple regression, correlation and distribution free methods. Prerequisites: MSPH 70001 Epidemiology I and MSPH 70201 Biostatistics I.
Health Education and Promotion	This course introduces students to the basics of program evaluation from the public health perspective. Elements of program evaluation will include steps as engaging stakeholders, describing the program, focusing on the evaluation design, gathering credible evidence, justifying conclusions, and ensuring the use and sharing of lessons learned.
Managed Care	This course is designed to create a basic understanding of the managed health care environment in the United States. The course will cover: the history, growth, and development of managed care; the various types of managed care organizations; contracting in the current health care delivery system; medical management; general management; marketing; finance; underwriting; and legal/regulatory issues.
Geographical Information Systems	This course is designed to introduce students to the basic principles and techniques of GIS, a computer-based tool that uses spatial (geographic) data to analyze and solve real-world problems.
Occupational Health I	A general overview of occupational health and safety, including historical development, concepts and a general introduction to recognition, evaluation, and control of hazards. The diagnosis, pathophysiology, management, and prevention of work connected illness and accidents are surveyed.
Industrial Hygiene	This course introduces the field of industrial hygiene and to occupational health, in general. The instructor focuses on introducing concepts, terminology, and methodology in the practice of industrial hygiene and identifies resource materials.
Readings in Public Health	An intensive reading course under the guidance of a division faculty member in an area of public health. The class meets weekly to discuss the selected readings. A minimum of 3 books will be completed over the course of the semester. This course presents an opportunity for advanced graduate students to conduct individual readings in public health to broaden their areas of knowledge and potential research opportunities.

**MSPH Electives, continued**

Program Evaluation	This course introduces students to the basics of program evaluation from the public health perspective. Elements of program evaluation will include steps as engaging stakeholders, describing the program, focusing on the evaluation design, gathering credible evidence, justifying conclusions, and ensuring the use and sharing of lessons learned.
Health Inequity/ Health Disparities	Health inequities are systematic differences in the opportunities groups have to achieve optimal health, leading to unfair and avoidable differences in health outcomes. The purpose of this course is to raise awareness of MSPH students to the ways health disparities and inequity impact the lives of patients, clients, and underserved populations.
Community/Population Health	The purpose of this course is to introduce community and population health. It will provide a broad overview of related concepts, public health practice, and research. Students will learn about the evolution of community health and its impact on society. Emphasis will be placed on the social determinants of health and interventions designed to improve health of vulnerable and underserved populations.
Occupational Health II (Residents)	Workplace relationship of specific hazards such as solvents and metals are examined. Cancer is the main entity covered—its etiology, prevention, diagnosis, treatment, and control. History taking (standard and predictive for placement and surveillance), patch treating, treatment trials and protective measures are reviewed.
Health Economics	This course is designed to acquaint students, through lectures and discussion, with those principles and techniques of economic analysis that are helpful in developing and evaluating health programs. The course will concentrate on selected topics in economics, allocation of public goods and economic dynamics. Case studies will be selected for their special relevance to the health field.
Sphere of Ethics	This course provides students with a comprehensive foundation in ethics. Topics covered in this course include many of the complex, real-life ethical issues that have attracted public health attention in recent years, such as undue influence of research participants, subject recruitment, concerns about social justice in the context of biomedical research, and uncertainty about new forms of biomedical research.
Occupational Toxicology (Residents Only)	Basic toxicological principles such as dose response, metabolic pathways and factors influencing toxicity are studied. The response of specific organ systems to toxic agents and recognition of clinical manifestations of specific classes of toxicants are emphasized.
Violence in Public Health	This course addresses violence from a public health perspective and provides an overview of various prominent theoretical perspectives of violence, including the ecological model applied to violence. In this course students can expect to review multiple forms of violence such as child abuse, sexual violence, and the implications of current events on the national dialogue regarding violence. The course includes review of violence prevention policies and interventions.



Division of Public Health Practice  
MSPH Program