Master of Public Health (MPH) Courses Available to Medical Students

BIOS 5200: Principles of Biostatistics (3 credits)  
Instructor: Carl Rosenberg, PhD  
Introduction to statistical methods in public health. The course will cover descriptive statistics, probability concepts, and estimation of parameters, hypothesis testing, simple linear regression, correlation, and analysis of attribute data.

CHSC 5200: Health Behavior and Risk Reduction (3 credits)  
Instructor: Tracey Wilson, PhD  
An introduction to the concepts, theories, and status of research in health promotion and disease prevention, with an emphasis on methods employed to modify group and individual health-related behaviors. This course examines methods of ascertaining health behaviors, the design and interpretation of behavioral intervention programs to modify behaviors, and current trends in the study of how lifestyle and preventive health practices impact on public health.

CHSC 5201: Introduction to Public Health Theory and Practice (3 credits)  
Instructor: Varies  
Introduction to the broad concepts of public health practice including the mission, core functions, structure, policy role, program activities, and collaborative endeavors of public health agencies. Theoretical and practical perspectives are studied to illustrate contemporary strategies for health promotion and disease prevention at local, state, and national levels.

CHSC 5309: Introduction to Global Public Health (3 credits)  
Instructor: Stephan Rinnert, MD  
Introduction to Global Public Health through discussion of global public health issues in different geo-political settings, of health dynamics and their impact on global health, and the role of public health in implementing interventions.

Students will realize the basic principles of Global Public Health through their direct application to three different country scenarios: 1. Earthquake response, 2. Refugee crisis, and 3. Non-crisis foreign healthcare system.

At the completion of the course students will show a basic understanding of global health terminology, critical global health issues, global health care disparities, important global public health stakeholders, and the role of public health in the global context.

EOHS 5200: Issues in Environmental Health (3 credits)  
Instructor: Laura Geer, PhD  
Major environmental health issues. The course addresses public health issues in the management of water quality, wastewater, occupational health, trace elements, municipal and hazardous waste, vector control and air quality.

EPID 5200: Principles of Epidemiology (3 credits)  
Instructor: Elizabeth Helzner, PhD  
This course offers an introduction to the principles, concepts, and methods of epidemiologic research. Topics include the calculation, interpretation and application of measures of disease frequency, association and public health impact; epidemiologic study design and analysis (including the role of chance, bias and confounding); direct standardization of rates, statistical inference and principles of screening. This course also teaches students how to apply epidemiologic methods to critically analyze and interpret public health literature.

HPMG 5206: Introduction to Health Policy and Management (3 credits)  
Instructor: Karen Benker, MD, MPH  
This course uses a multi-disciplinary approach to policy and management in both the healthcare and the public health systems. Students will learn the organization, financing, and delivery of services within these systems as well as their legal and ethical bases. Students will also develop skills in program planning, development, budgeting, and evaluation; in strategic planning; in ensuring community health safety and preparedness; and in quality improvement initiatives. A central theme of the course is the accessibility and outcomes of care for urban and immigrant populations.

HPMG 5207: Principles in Hospital Management (3 credits)  
Instructor: Karen Benker, MD, MPH  
This course helps prepare a student for potential leadership positions in hospitals and other healthcare settings. It explores in depth a range of practical topics including governance, legal and ethical issues, risk management, quality management, accreditation, licensing, marketing, financial management, regulatory compliance, strategic planning, departmental roles and the migration of services to ambulatory settings. Case studies, team exercises, and interviews with organizational leaders form the framework of the course.