# **PUBLIC HEALTH (MPHN)**

#### MPHN 600 Introduction to Public Health Practice (1 Credits)

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

# MPHN 605 Intro to Biostatistics for Public Health (3 Credits)

This course provides students with basic concepts, and fundamental methods in biostatistics to, investigate and evaluate public health issues., Students will utilize statistical software to, perform data analysis and make informed decisions, from real data collected from public health, studies. This process includes data exploration, review of underlying statistical assumptions, summary and analysis of data using common, descriptive and inferential statistical methods, interpretation of the statistical results, and, finally preparation of a statistical report.

# MPHN 608 Environmental and Public Health (3 Credits)

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.

## MPHN 611 Soc and Beh Sciences for Public Health (3 Credits)

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.

# MPHN 614 Epidemiology (3 Credits)

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.

# MPHN 616 Research Methods in Public Health (3 Credits)

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.

### MPHN 620 Health Mngt and Systms Thinking (3 Credits)

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.

### MPHN 650 Foundations of Health Equity (3 Credits)

This course provides graduate students with an, introduction to the intersection between public, health and health equity. Studies will conduct an, in-depth examination and discussion of theories, of social justice (including health equity) and, determinants of health and research, advocacy and, other approaches for addressing social injustices, intertwined with public health inequities and, promoting justice and equity.

#### MPHN 651 Community Health Assessment (3 Credits)

This course introduces students to the concepts, and methods of community health improvement, and the role of assessment. Learning and skill, development will focus on important community, health topics, including systems thinking that, leads to coordination of health care and public, health activities to achieve community health, goals; the nature of health and its determinants;, the use of quantitative and qualitative methods;, data analysis; community mobilization and capacity, building; the impact of current national policy on, community health improvement; and the, application of social justice or health, principles.

#### MPHN 652 Public Health Informatics (3 Credits)

This course introduces students to public health, informatics, the systematic application of, information, computer science and technology to, public health practice, research and learning., Students will learn how to think critically about, population level data and based on an, understanding of informatics approaches address, pressing public health issues, such as the, integration of comprehensive care services for, vulnerable populations, engaging populations in, health behaviors using information technologies, health surveillance, management of very large, data sets across the health system, comparative, effectiveness analysis and appropriate use of, population health data analytics to influence, public health programs and policies.

# MPHN 653 Public Health Leadership (3 Credits)

This course focuses on the practice of leadership, in public health settings. Leadership theory and, research will provide a foundation for identifying, common attributes and behaviors of effective, leaders; understanding how to apply common, leadership practice to a variety of situations;, and assessing strategies leaders use to remain, flexible and adapt to changing circumstances. This, course will also focus on how public health, leaders can influence organizational and community, priorities, goals and activities and address and, promote public health equity.

# MPHN 669 Public Health Practicum (3 Credits)

The Public Health Practicum requires students to, integrate and synthesize knowledge and skills, through the application of public health theories, and principles to the development and, implementation of a special project in a selected, domain of professional public health practice., This course provides students with an in-depth, supervised experience in an approved, organization and an opportunity to integrate, perspectives from other sectors and/or, professions.

### MPHN 680 Community-Based Participatory Research (3 Credits)

This course provides an overview of theories, principles and strategies associated with, Community-Based Participatory Research (CBPR)., This introductory course is intended for, graduate students interested in adding CBPR to, their toolkit of effective approaches for, understanding and addressing social and health, inequities in public health. This course is not a, methodology course. CBPR is an approach to, conducting research that is amenable to a variety, of research designs and methodologies. This course, focuses on the CBPR approach to research, and will not cover topics such as survey design, quantitative methods, qualitative methods, focus, groups, community needs assessment procedures, etc. Students will explore topics such as the, purpose and applications of CBPR; partnership, formation and maintenance; issues of power, trust, race, class, and social justice; cultural, competency; ethical issues; and CBPR's, relationship to cultural knowledge systems.