COURSE DESCRIPTIONS

These courses will be offered by the Master of Public Health program at St. John's University.

MPH 204 / PAS 204: Health Care System and its Financing

This course will provide an overview of those factors affecting the access, disparity, efficiency and quality of the U.S. health care system. These factors include: demographic changes, demand for services, cost shifting, use of health technology, health care workforce distribution, financing of services by public and private payers, the rise of cost containment, Medicare and Medicaid, the evolution of the managed care market, and health care reform initiatives. Students will gain an appreciation of the dilemmas confronting policy makers, providers, and the public, and how to balance the conflicting priorities in the current health care system. *Credit: 3 semester hours.*

MPH 219 / PAS 219: Healthcare Outcomes Assessment

This course is designed to provide a comprehensive review of economic analysis and health status assessment in the appraisal of health outcomes and program effectiveness in health service research. Major economic evaluation methods such as: cost effectiveness analysis, cost benefit analysis and cost utility analysis are introduced in the context of current health care service system. Application of economic tools and quality of life evaluation instruments in clinical investigations, health services research, and policy analysis will be discussed. *Credit: 3 semester hours.*

MPH 252 / PAS 252: Biostatistics

This course will allow the student to conceptualize the different statistical methods used to evaluate drugs and health care protocols used in clinical and non-clinical public health settings. While the principal emphasis will be placed on data analyses involving animal and humans in preclinical and clinical studies, case studies will involve the application of the concepts learned in the course to other health related fields including but not limited to public health. *Credit: 3 semester hours.*

MPH 275: Introduction to Public Health Management

This course will introduce the student to the historical evolution of public health infrastructure and practice and provide an introduction to public health management. Disease surveillance, conflict and collaboration between public health and medicine, and historical and contemporary ethical issues will also be discussed. In addition, the course will: 1) explore public health ethics and responses to conditions such as infectious and noninfectious diseases, birth defects, bioterrorist threats, and occupational health hazards; and 2) examine the establishment and measurement of national health objectives in relation to the expansion of public health surveillance systems, strategies for disease prevention and control and health promotion. *Credit: 3 semester hours.*

MPH 280 / PAS 280: Introduction to Epidemiology

This course introduces students to the basic concepts of epidemiology as applied to public health problems. The course will examine how epidemiology contributes to assessing the health of the population, identifying the risk factors that may cause diseases and evaluating the procedures for studying and preventing diseases. Students will learn the historical background of epidemiology and understand its practical applications to improve health. Key epidemiological concepts such as, measures of morbidity and mortality, association and measures of effect, bias and confounding will be covered. Evaluation of published research studies across key epidemiological study designs will also be discussed. *Credit: 3 semester hours.*

MPH 285 / TOX 285: Introduction to Environmental Health Sciences

Environmental health sciences represent the study of environmental factors including biological, physical and chemical factors that affect the health of a community. The course will examine the causal links among chemical, physical, and biological agents in the environment and their impact on human health. The basic principles of toxicology will be presented. The overall role of environmental risks in the pattern of human disease, and the engineering and policy strategies, including risk assessment, will be introduced. The class will be structured around the things we do as individuals and societies that result in environmental health hazards. *Credit: 3 semester hours.*

MPH 301 / PAS 301: Social and Behavioral Health

The course is designed to introduce the student to social concepts and processes that influence health status and public health interventions. The course will provide an introductory background to the kinds of social and behavioral theories that guide our understanding of health related behavior and explore some of the ways in which these theories and approaches may be used in public health practice. The course will also provide insights into psychosocial issues in public health and familiarize students with key socio-behavioral concepts such as culture, race/ethnicity, gender, poverty/disparities, factors related to behavior change, community, organizational climate, and family. Further, the role of these concepts in shaping, developing and impacting public health policies and programs will be explored. *Credit: 3 semester hours*.

MPH 302 / PAS 302: Health Care Data Analysis and Management

This course is designed to develop effective data management skills in clinical and health care research. The course will provide graduate students with an overview of the SAS software and provide technical skills for data management, data analysis, and producing graphs and reports. Hands-on experiences and assignments with real world data from a wide variety of sources such as health care administrative files and Health Survey databases from National Center for Health Statistics will be offered to enable students to master the skills learned in the course. Other statistical packages such as SPSS and STATA will also be briefly discussed. *Credit: 3 semester hours.*

MPH 303: Public Health Program Planning

The course is designed to provide students with a systematic approach to planning effective public health programs. Students will learn the general principles of public health program planning including needs assessment, design, implementation and evaluation. Various tools/ models will be introduced to offer students an overview of the public health program planning process. Utilizing knowledge and skills, the student should be able to develop a plan for implementing an effective public health program and/or intervention to address public health issues affecting the communities at local, national, and international levels. *Credit: 3 semester hours.*

MPH 304: Public Health Program Evaluation

This course will provide students with an overview of program evaluation, evaluation methods, evaluation design methodology, and application of qualitative and quantitative analysis tools to evaluate data; as well as methods for enhancing the likelihood that evaluation results are utilized. Quantitative and qualitative research methods will be discussed. A critical examination of a wide variety of research and program evaluation designs and methods used in applied areas of health care will be evaluated. *Credit: 3 semester hours*.

MPH 305: Geographic Information Systems (GIS)

This course is an introduction to the concepts of Geographic Information Systems (GIS) as they apply to public health. It will focus primarily on analyzing the spatial-temporal distribution of demographic risk factors for disease outcomes and the implications for planning and targeting public health interventions. Participants will acquire hands-on experience using type of GIS software to create and manage geo-referenced data layers; learn principles of geocoding and the use of Global Positioning Systems (GPS); perform queries, searches, and statistical analyses; and create maps and reports for the field of public health. A specific focus will be on assessing the spatial epidemiology of health disparities and access to healthcare. *Credit: 3 semester hours.*

MPH 306: Research Methods in Public Health

The course will introduce the student to the fundamentals of research study design, data collection, data analysis and interpretation of study results in a public health research or evaluation project. It serves as an introduction to various quantitative, qualitative, mixed method and participatory approaches for undertaking research on issues pertaining to public health and health services evaluation. Ethical issues in conducting a public health research will also be introduced. *Credit: 3 semester hours.*

MPH 310: Health Disparities

This course will introduce the concept of health disparities in relation to socioeconomic status (SES), racial and ethnic group in the United States. Students will compare health status across social, racial and ethnic groups and discuss the concept of socioeconomic status and its association between poverty and poor health. Disparities in access to health care, racial and ethnic bias on the part of the health care providers, and race-based pharmaceuticals will also be discussed. Students will also examine the interrelationships among immigration, assimilation, and acculturation and disparities in minority communities. Public policy interventions and best practices designed to address these disparities, will also be introduced. *Credit: 3 semester hours*.

MPH 311: Health Promotion and Disease Prevention

The purpose of this course is to evaluate different approaches to health promotion and disease prevention for different target groups. The course focuses on the specifics of intervention both development and delivery and how these might vary across settings, behaviors and strategies. The course will emphasize examples of intervention creation, delivery and effectiveness. Emphasis will also be placed on understanding the resources, and other practical considerations necessary to produce, deliver, monitor, and disseminate an intervention with demonstrated effectiveness. *Credit: 3 semester hours*.

MPH 312: Health Communication

This course will enable the student to collect, manage and organize data to produce information and demonstrate ability to present this information in meaningful ways to different audiences. The course is designed to help public health professionals apply sound judgment when making decisions about how to communicate effectively with the public. The course includes theoretical and practical content on: persuasive approaches to group and individual change; audience, message, and channel factors in campaign development; and measurement of campaign impacts. Communication approaches such as mass media, social marketing, risk communication and entertainment education will be discussed, and the ethical dimensions of contemporary issues such as direct-to-consumer marketing will be explored.

MPH 315: Global Health and Healthcare in Developing Countries

This course will explore factors that contribute to unequal prevalence of diseases and status of health in the world and introduce key concepts of global health. The student will be introduced to the burden placed by diseases on the economic resources of developing countries; challenges faced by the global health systems along with economic and social inequity issues around the world. Topics to be explored will include: the HIV/AIDS epidemic, access to pharmaceuticals, human resources needs for health, maternal/child health and mortality. Key players in global health and their role in addressing existing critical global health issues will be discussed. Future challenges posed by global health will also be discussed. *Credit: 3 semester hours*.

MPH 316: Global Environmental Sustainability and Health

The course explores the major issues pertaining to the maintenance of a sustainable ecosystem as an essential prerequisite for population growth without compromising the ability of the next generation to meet its needs. Students will discuss the current challenges in global sustainability: climate stabilization, energy security, sustainable land use, biodiversity, population, food and water resources, climate change, energy, public health issues, and forecast for the environment and the human condition for the next several decades. The course will explore goals for reducing greenhouse gas emissions, improving global cooperation, and creating and expanding technologies and renewable energies. The specific role of the public health professional in the development of adaptation and mitigation strategies will also be discussed. *Credit: 3 semester hours*.

MPH 317: Public Health Practice

The fieldwork experience is designed to prepare students for professional practice in the public health industry by integrating course work with community public health practices. The Council of Education for Public Health (CEPH) requires that MPH students complete a "planned supervised and evaluated practice experience." Each student will work in an organization to addresses a public health issue. The practice is supervised by a qualified on-site public health professional. As students carry out the assigned projects, they will use the skills and knowledge learned in didactic courses and will be able to demonstrate an understanding of public health challenges in practice, which allows the students to connect the knowledge and competencies learned in the classroom to the public health profession. Each student will submit an interim report to document and track their progress towards goals and objectives. This course serves as the prerequisite to the Culminating Experience course. *Prerequisites: All core courses. Credit: 3 semester hours.*

MPH 330: Culminating Experience

The culminating experience will provide continued development of the students' skills and help in advancing the transition into knowledgeable public health professionals. The course will help the students to synthesize and integrate knowledge acquired in various learning environments and apply the theory and principles to an area of public health practice. This course is integrated with the fieldwork practice experience and requires application of the cross-cutting concepts and core areas of knowledge. Students will be required to plan, analyze, present their fieldwork experience and attend seminars. *Prerequisites: MPH 317 Public Health Practice. Credit: 3 semester hours.*