Icahn School of Medicine at Mount Sinai

Graduate School of Biomedical Sciences

GRADUATE PROGRAM IN PUBLIC HEALTH

Curriculum Guide AY 2025-2026

CEPH ACCREDITED MASTER'S

Table of Contents

Explanation of Course Numbering System

The Curriculum Guide includes courses that are offered through the Graduate Program in Public Health and begin with the prefixes MPH. The guide is organized according to the Category of Courses

- 1000-level: Core courses (foundation courses required for all students)
- 2000-level: Epidemiology & Biostatistics Concentration courses
- 3000-level: Global Public Health Concentration courses
- 4000-level: General Public Health Concentration courses
- 5000-level: Public Health Data Analytics Concentration courses
- 6000-level: Elective Courses (specialized and advanced public health topics)
- 9000-level: Applied Practice Experience and Culminating Experience related Courses

Course Pre-Requisites

Please note, some courses require that students have taken certain pre-requisites. These pre-requisites are often fulfilled when the student takes the core introductory level courses. Students will not be eligible to take a course if they lack the required pre-requisites. Please refer to the course description in the Curriculum Guide for information on each course's pre-requisites.

A course director may allow a student to take a course if they gained the pre-requisite knowledge through previous work, training, or other coursework. Please contact the course director for questions.

Core Courses

MPH 1000 – Introduction to Policy & Management (Formerly MPH 0100)		
Course Director: Ashley Fox, PhD	**Term Offered: Spring II**	**3 credits**
Why did U.S. health reform pass in 2010 when historically large-scale reform of this magnitude has been blocked? How will the states implement health reform, and will it be defeated through a constitutional challenge? Why is HIV prioritized over other health areas even though the global burden is lower than other diseases? How are new public-private partnerships transforming the financing of health systems? This course aims to assist students in understanding how political processes shape health policy and health outcomes both domestically and internationally. Through an introduction to theoretical and applied concepts in public policy and political science, students will learn how to assess the political feasibility of different health policy options and how to craft persuasive policy briefs targeting decision makers at all levels of government. In addition to theoretical material, the course will draw on insights from a concrete set of case studies across a variety of health policy topics including: the politics of health reform in the U.S., global health agenda setting, and health system strengthening in developing countries among other topics.		

MPH 1001 – Introduction to Socio-Behavioral Health
(Formerly MPH 0201)

Course Director: Maya Korin, PhD, MS	Term Offered: Fall	3 credits

This core course provides an overview of the social and behavioral sciences and their importance in the interdisciplinary field of public health. The course content will introduce students to several relevant social and behavioral theories of health, their application to public health issues, and their use in the development of policies, strategies, interventions and programs. Students will also learn how social hierarchies and disparities based on class, race/ethnicity, and gender intersect and influence the health and well-being of individuals and populations. In addition, some lectures will focus on social networks, social support and community capacity building. Through a series of assignments, students will enhance their knowledge and awareness of the role of social and behavioral sciences in public health and its relevance to their specific discipline.

MPH 1002 – Introduction to Biostatistics
(Formerly MPH 0300)

Course Director: John Doucette, PhD	Term Offered: Fall	3 credits

Lecture and Lab are required and may be held on separate days of the week.

This course introduces the principles underlying biostatistical methods and their application to problems in epidemiology, public health and clinical research. Students will learn about basic probability distributions, descriptive statistics, presentation of data, hypothesis testing principles, and the specific hypothesis tests and analytic methods for a variety of data types. These analytic methods will include t tests, chi-square tests, nonparametric tests, correlation, regression, and basic survival analysis methods. Students will have the opportunity to apply these methods to sample data both via direct calculation and using SAS® statistical software. Each week, a one-hour laboratory session will reinforce material from lecture with additional examples and instruction in use of the SAS® software. Methods for determining sample size and power for a variety of commonly used study designs will also be presented, as will measures of the accuracy of diagnostic and screening tests.

MPH 1002 DL – Online Introduction to Biostatistics Distance Learning
(Formerly MPH 0300 DL)

Course Director: John Doucette, PhD	Term Offered: Fall, Spring II	3 credits

This is an Online – Asynchronous Course.
This is a more independent, self-paced style course with prerecorded lectures and lab exercises released weekly online. Students will be able to view, study and practice each week's content any time during the week. This course is most appropriate for students with strong quantitative skills, those who are independent learners, and those who have previously taken a statistics course. No prior knowledge about statistics is assumed, however, and the online option is open to all.

This course provides an introduction to the principles underlying biostatistical methods and their application to problems in epidemiology, public health and clinical research. Students will learn about basic probability distributions, descriptive statistics, presentation of data, hypothesis testing principles, and the specific hypothesis tests and analytic methods for a variety of data types. These analytic methods will include t tests, chi-square tests, nonparametric tests, correlation, regression, and basic survival analysis methods. Students

will have the opportunity to apply these methods to sample data both via direct calculation and using SAS® statistical software. Each week, a one-hour laboratory session will reinforce material from lecture with additional examples and instruction in use of the SAS® software. Methods for determining sample size and power for a variety of commonly used study designs will also be presented, as will measures of the accuracy of diagnostic and screening tests.

MPH 1003 – Research Methods
(Formerly MPH 0320)

Course Director: Maya Korin, PhD, MS	Term Offered: Spring II	1 credit

Research Methods encompasses a set of fundamental skills and tools necessary for approaching the process of developing and answering a research question, being a future investigator, or an informed consumer of information in the marketplace. This course provides a solid and practical framework enabling students to successfully embark upon their Culminating Experience. As a prerequisite in the conduct of research, it prepares students to conceptualize, propose, design, and write research papers in general.

Topics covered include the characteristics of a research study, formulating a research question, experimental research designs, survey construction, data analysis and interpretation, and evaluation of research. Also addressed are strategies for conducting literature searches, research ethics, informed consent, and elements of a research proposal. Students will be required to complete IRB training, HIPPA training, data security training, and outline a research proposal for their Culminating Experience project by the end of this course.

Full time students are required to take this course in the Spring II Term of their first year in the Master of Public Health Program. The course is only open to matriculated students in the Master of Public Health Program.

This course is graded on a Pass/Fail basis.

MPH 1004 – Introduction to Epidemiology
(Formerly MPH 0400)

Course Director: Stephanie Factor, MD, MPH	Term Offered: Fall, Spring I	3 credits

Lecture and Lab are required and meet on separate days of the week

This introductory course focuses on the fundamental concepts of epidemiology and its application to the field of public health. The course will provide students with an insight to epidemiologic methods and how they can be used to study health outcomes in human populations. Students will learn the elements of epidemiology, such as causation, study design, measures of effect, and potential biases. Practical and theoretical training will include lectures, small group discussions, and readings.

MPH 1005 – Introduction to Environmental Health
(Formerly MPH 0500)

Course Director: Lauren Zajac, MD, MPH & Candace Tannis, MD, MPH	Term Offered: Spring I	3 credits

This course provides an overview of important topics in environmental and occupational health. The classroom sessions will focus on the health effects of exposures arising from air, water, food, work, built

environment, and climate change. Case studies, current events, and relevant public health data tools will be emphasized. Small group sessions will allow students to explore and interpret environmental health data and discuss this data in context of common environmental public health case studies. Applicable principles of risk communication, toxicology, environmental epidemiology, and preventive medicine, as well as fundamentals of occupational and environmental laws and regulation will be discussed. The course will also highlight principles of environmental justice and addressing structural determinants of environmental health disparities.

The course provides basic underpinnings of the theory and practice of environmental health, and provides a structural framework for thinking about the field as a public health discipline.

Epidemiology & Biostatistics Concentration Specific Courses

MPH 2000 – Epidemiology II
(Formerly MPH 0412)

Course Director: Maayan Yitshak-Sade, PhD	Term Offered: Spring I, Spring II	3 credits

Epidemiology is the study of the distribution and determinants of health-related states and events in specified populations, and the application of this knowledge to control health problems. This course will introduce students to concepts that guide the design and analysis of various epidemiologic study designs, including counterfactuals, confounding, effect measure modification, measurement error and bias, as well as practical considerations. In parallel with lectures and assigned readings, lab sessions will guide students through applications of these concepts, including constructing causal diagrams and using R software for epidemiologic analysis. Prior R knowledge is **not** needed

Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology
MPH 1002 (formerly MPH 0300) Introduction to Biostatistics
Basic SAS proficiency

MPH 2001 – Epidemiology III
(Formerly MPH 0420)

Course Director: Katharine McCarthy, PhD	Term Offered: Spring II	3 credits

Building upon the foundations of epidemiologic methods and design introduced in previous courses, Epidemiology III will cover the theoretical and practical considerations of analysis and interpretation of data generated from epidemiologic studies. Through lectures and guided analysis of epidemiologic datasets, students will learn the analytic approaches and modelling techniques used to investigate exposure-disease relationships within various epidemiologic study designs. This course will also include more advanced topics such as mediation analysis and the use of sensitivity analyses to quantify the impact of potential biases. As part of this course, students will perform an independent analysis of epidemiologic data to demonstrate mastery of the presented content. Students can use any statistical software they prefer for assignments, but all course examples, sample code and programming support will be provided using SAS only.

Pre-requisites:

MPH 2000 (formerly MPH 0412) Epidemiology II

MPH 2002 – Applied Linear Models I
(Formerly MPH 0812)

Course Director: John Doucette, PhD	Term Offered: Spring I	3 credits

Regression analysis is a widely used set of methods for exploring the relationships between response variables and one or more explanatory variables. This course provides an introduction to regression methods for a single continuous response variable. Both linear and curvilinear regression models are considered. Model assumptions, and regression diagnostics for assessing those assumptions, are explored in detail. Strategies for model selection are presented. The emphasis is on concepts and application rather than on underlying theory. As mathematical results are presented without proof, students are not required to be proficient in calculus or matrix algebra.

Pre-requisites:
MPH 1002 (formerly MPH 0300) Introduction to Biostatistics

MPH 2003 – Applied Linear Models II
(Formerly MPH 0822)

Course Director: Elena Colicino, PhD	Term Offered: Spring II	3 credits

This course provides a comprehensive overview of regression methods for analysis of categorical (binary and count) data and survival data, with applications to epidemiological and clinical studies. Topics discussed include logistic regression analysis, log linear model for contingency tables, Poisson regression, and survival regression. The emphasis is on concepts and application rather than on underlying theory. As mathematical results are presented without proof, students are not required to be proficient in calculus or matrix algebra.

Pre-requisites:
MPH 2002 (formerly MPH 0812) Applied Linear Models I

Global Health Concentration Specific Courses

MPH 3000 – Introduction to Global Health
(Formerly MPH 0700)

Course Director: Maria Rosa, DrPH	Term Offered: Fall	1 credit

This course introduces the major concepts and principles of global public health with particular emphasis on neglected populations. The course provides students with an understanding of the principles of health within the context of development, human rights, and globalization, and provides an appreciation of the pertinent challenges and controversies. Students will learn about the establishment of global health priorities, develop an appreciation for issues related to underserved populations, and learn about the major players in the global arena, including the challenges of financing. The course decolonizes global health education by rethinking institutional global public health partnerships and approaches.

A multidisciplinary approach is used to discuss the major determinants of health and disease with particular emphasis on the relationship between health and socioeconomic development. Students will meet some experts in the field and are encouraged to engage in discussions of the most current and important global public health topics. By the end of the course, students will have been introduced to the most important

players, challenges and variables of global health and their interactions. They will be prepared to advance to more specific and in-depth courses of the Global Health Concentration.

MPH 3001 – Planetary Health
(Formerly MPH 0722)

Course Director: Nicholas DeFelice, PhD	Term Offered: Spring I	3 credits

This course explores the interconnections between human, animal, and environmental systems — a framework known as One Health — and expands to include the broader implications of Planetary Health, which addresses the impact of global environmental changes on health. Students will engage with emerging threats like zoonotic spillover, climate-sensitive diseases, antimicrobial resistance, and ecosystem degradation using interdisciplinary tools for planetary health assessment. Through interdisciplinary learning, we will also explore historical outbreaks and how disease monitoring surveillance systems are structured with the goal of developing public health decision tools for high-uncertainty situations.

Comfort with basic statistics and interest in systems thinking encouraged.

MPH 3002 – Climate Change, Atmospheric Environment and Global Health
(Formerly MPH 0721)

Course Director: Yaguang Wei, PhD	Term Offered: Spring II	3 credits

The atmospheric environment is sensitive to climate change and has significant implications for global health. This course explores how pressuring global atmospheric environmental issues, including heat wave, long-term temperature change, ambient air pollution, and wildfire smoke, affect human health in the context of a changing climate. In addition to acquiring theoretical knowledge, students will apply modern statistical and epidemiologic techniques to real-world datasets using R to model the health effects of climate change-related exposures. This course focuses on developing practical knowledge and skills for climate change and global environmental health research, and follows a learn-by-doing approach, which combines lectures with structured labs.

Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology
MPH 1002 (formerly MPH 0300) Introduction to Biostatistics

MPH 3003 – Global Reproductive, Maternal and Child Health
(Formerly MPH 0717)

Course Director: Laura MacIsaac, MD	Term Offered: Spring II	3 credits

This course introduces the student to the challenges that perpetuate high rates of maternal and childhood morbidity and mortality in low and middle-income countries. This includes not only discussion of the health issues that drive this mortality, such as HIV/AIDS, malaria, diarrheal disease, obstetric complications and malnutrition, but also the respective health system and structural barriers that limit access to quality health services and contribute to the vulnerability of women and children. Approaches to improve maternal and child survival, including facility and community-based interventions, will be examined as well. The course is case-based and students will be involved in intensive small group problem solving exercises through which they will learn the necessary skills to address problems facing mothers and children in low and middle-

income countries. The course emphasizes participatory learning, in-class discussion, self-directed research, and small group exercises. Registration is limited to 20 participants on a first come (register) first served basis.

Pre-requisites:
MPH 3000 (formerly MPH 0700) Introduction to Global Health

General Public Health Concentration Specific Courses

MPH 4000 – Program Planning
(Formerly MPH 0014)

Course Director: Sophia Curdumi Pendley, PhD, MPH	Term Offered: Fall	3 credits

This course is cross listed as MHA 0520

Students who successfully complete this course will be able to design an evidence-based and culturally appropriate public health program, in both US and developing country contexts. The course requires quite a bit of small group work in teams of three to develop a final plan for a public health program. The small groups are required to submit four graded assignments and meet with the professor via Zoom four times during the fall term to get feedback. Specifically, students will gain competence in analyzing local needs and resources; developing an evidence-based and technically and programmatically sound causal pathway; articulating program objectives; designing relevant program partnerships and technical components; and designing the program's monitoring and evaluation plan, implementation plan and budget.

MPH 4001 – Health Promotion Strategies
(Formerly MPH 0216)

Course Director: Malika Garg, MD, MS	Term Offered: Spring II	3 credits

Health promotion is the practice of educating, equipping, and empowering individuals with the information and resources they need to fight disease. It is the process of empowering people to increase control over their health and its determinants through health literacy efforts and multisectoral action to increase healthy behaviors. This includes activities focused on individual behavior as well as a wide range of social and environmental interventions. Health promotion typically addresses behavioral risk factors such as tobacco use, obesity, diet and physical inactivity, as well as areas of mental health, drugs and alcohol abuse, and sexual health.

Increasingly, lifestyle strategies such as whole food, plant-based diet, exercise, stress management, tobacco and alcohol cessation, and other non-drug modalities are being used to prevent, treat, and reverse chronic disease. This course offers the knowledge and skills recommended by a national panel of representatives from physician and health professional organizations as the basis for providing quality health promotion in lifestyle medicine services.

Topics focus on clinical processes, as well as a review of key modalities: nutrition, physical activity, behavior change, tobacco cessation, managing risky substance use, and stress management / emotional wellness. The course provides basic grounding the field of health promotion and disease prevention via lifestyle medicine and focuses on practice skills for public health professionals.

MPH 4002 – Environmental & Occupational Epidemiology
(Formerly MPH 0419)

Course Director: Mathilda Chiu, ScD	Term Offered: Spring I	3 credits

This course focuses on the fundamentals of epidemiological methods specific to environmental and occupational health research. The course will provide students with an insight to appropriate study designs and methodologies to investigate health effects of environmental and occupational exposures in different settings. These include essential concepts involved in generating research hypotheses, as well as environmental and occupational health specific issues such as use of exposure biomarkers, exposure sampling and modeling of exposures, study design issues, confounding and other types of bias, and phenotyping issues as they relate to environmental and occupational factors. We will also review novel data analytic strategies unique to environmental and occupational health (e.g. exposure mixtures), the nascent field of exposomics, and the interpretation of the study findings and public health implications for environmental and occupational epidemiological research. The students will also learn the techniques for critical appraisal of environmental and occupational epidemiological studies. These are achieved through lectures with in-depth discussion of current research status on environmental and occupational epidemiology, readings, homework assignments, mid-term exam, hands-on statistical analysis workshops, and a final project.

Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology
MPH 1002 (formerly MPH 0300) Introduction to Biostatistics

MPH 4003 – Implementation Science
(Formerly MPH 0020)

Course Director: Sophia Curdumi Pendley, PhD, MPH & Hannah Thompson, MD, MPH	Term Offered: Spring II	2 credits

This course provides a comprehensive introduction to implementation science—the study of methods and strategies to promote the adoption and integration of evidence-based interventions, practices, and policies in public health and healthcare settings. The course explores foundational theories, models, and frameworks used in implementation research and practice, emphasizing real-world application to bridge the gap between research and effective population health impact. Students will engage with case studies, current literature, and applied exercises to develop the skills necessary to design, evaluate, and sustain implementation strategies across diverse settings and populations.

Public Health Data Analytics Concentration Specific Courses

MPH 5000 – Introduction to Public Health Data Modeling
(Formerly MPH 0602)

Course Director: Youssef Oulhote, PhD	Term Offered: Spring II	2 credits

This course introduces students to core statistical modeling approaches applied in public health data analysis. Students will learn how to select, apply, and interpret statistical models, including both linear and non-linear models. The course includes strategies for building models, adequate choice of models to answer specific public health questions, and data reporting and interpretation. Emphasis is placed on developing practical

analytical skills using statistical software, with a focus on real public health datasets and effective communication of results to public health audiences.

Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology
MPH 1002 (formerly MPH 0300) Introduction to Biostatistics

MPH 5001 – Introduction to Epidemiology Data Analysis with R and Python
(Formerly MPH 0413)

Course Director: Elza Rechtman, PhD	Term Offered: Spring I	3 credits

R and Python are both open-source languages widely used by epidemiologists to manage and clean data, carry out statistical analyses of epidemiologic data, and produce high-quality figures for research communications. This course will give students a solid foundation in the most important tools for performing epidemiology data analyses using R and Python. Students will learn how to import data, merge datasets, clean and transform variables, visualize, and model population data. Emphasis will be given to modeling approaches for association estimates calculation such as beta coefficients, relative risks, and odds ratios using R as well as data wrangling and exploratory data analysis with Python. Students will also learn about the similarities and differences between R and Python, and how to strategically leverage the strengths of each language depending on the task at hand. Students will be given hands-on training during class and work on an epidemiologic project using R and Python. A key learning goal of this course is to help students familiarize with R and Python and build basic coding skills primarily in R, and extending to Python, while recognizing each unique strengths and complementary utility. Prior programming experience is helpful but not necessary.

Pre-requisites:

MPH 1002 (formerly MPH 0300) Introduction to Biostatistics

MPH 5002 – Introduction to Geoinformatics in Public Health
(Formerly MPH 0601)

Course Director: Itai Kloog, PhD	Term Offered: Spring I	3 credits

This course introduces students to the foundational tools and concepts of geoinformatics as applied to public health. Students will learn how to analyze, visualize, and interpret spatial health data using open-source GIS platforms such as QGIS and R. Through weekly labs and assignments, students will gain hands-on experience in mapping environmental exposures, identifying geographic patterns in health disparities, and conducting spatial epidemiologic analysis. Geoinformatics has become a crucial methodology in understanding and addressing public health challenges that vary by place, such as access to care, environmental risks, and disease outbreaks. By equipping students with these skills, this course supports the growing need for spatial thinking and data science in public health research, planning, and policy.

Recommended Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology

MPH 5003 – Machine Learning in Public Health (Formerly MPH 0603)		
Course Director: Vishal Midya, MStat, PhD	**Term Offered: Spring II**	**3 credits**
This course provides a comprehensive overview of unsupervised and supervised machine learning algorithms for analysis of continuous and categorical (binary) data, with a focus on applications for public health and epidemiology research. Topics discussed include hierarchical clustering, principal component analysis, factor analysis, LASSO, ridge and elastic net regressions, random forest algorithm, combined with hands-on training using public health datasets. The emphasis is on machine-learning concepts and applications in public health, rather than underlying theory. As mathematical results are presented without proof, students are not required to be proficient in calculus or matrix algebra to take this introductory course. Pre-requisites: MPH 1002 (formerly MPH 0300) Introduction to Biostatistics MPH 5000 (formerly MPH 0602) Introduction to Public Health Data Modeling or MPH 2002 (Formerly MPH 0812) Applied Linear Models I		

Elective Courses

MPH 6000 – Introduction to Public Health (Formerly MPH 0001)		
Course Director: Cappy Collins, MD, MPH	**Term Offered: Fall**	**1 credit**
This introductory course will provide a broad overview of the power of public health. We cover fundamental public health concepts to guide your studies and careers. A principal goal of the course is to give students an understanding of the function of public health as a set of tools to improve the health and achievement of populations. Guest speakers include a diverse array of professionals from various disciplines to provide students with a sense of the breadth and depth of public health as well as a sense of the extraordinary range of career opportunities that exist in this dynamic field.		

MPH 6001 – History of Public Health in America (Formerly MPH 0015)		
Course Director: Paul Theerman, PhD	**Term Offered: Spring II**	**3 credits**
What can history tell us about the current state of public health in the United States? This overview of the history of public health will examine evolving notions of a healthy public. Looking at the underlying social, political, and cultural structures that aid, hinder, and shape the public health mission, it will place the history of public health in the context of the larger histories of medicine, the nation, and the world. Several disease case studies will be looked at in detail, to provide insight into the factors that go into successful--and unsuccessful--public health movements. The course will conclude with a look at recent public health crises, to understand them within the context of global history.		

MPH 6002 – Public Health Surveillance
(Formerly MPH 0002)

Course Director: Hannah Thompson, MD, MPH	Term Offered: Spring I	3 credits

Public health surveillance is the ongoing systematic collection, analysis, and interpretation of data to prevent and control disease. This course will introduce students to local, national and global surveillance systems, including NHANES, BRFSS, NYC Community Health Survey. Through class lectures, demonstrations and lab assignments students will link health data to public health practice. The course is a requirement for students in the Health Promotion Disease Prevention Concentration.

MPH 6003 – Community Based Participatory Research
(Formerly MPH 0019)

Course Director: Sophia Curdumi Pendley, PhD, MPH	Term Offered: Fall	2 credits

This graduate-level course introduces students to the principles, methods, and practices of Community-Based Participatory Research (CBPR), an approach that equitably involves community members, organizational representatives, and academic researchers in all aspects of the research process. Emphasizing collaboration, co-learning, and mutual benefit, CBPR is increasingly recognized as a powerful strategy for addressing complex public health challenges and reducing health disparities. Through lectures, readings, case studies, and community-engaged assignments, students will explore the theoretical foundations of CBPR, ethical considerations, and practical strategies for building sustainable partnerships.

MPH 6004 – Social Justice in Public Health & Medicine
(Formerly MPH 0007)

Course Director: Rosamond Rhodes, PhD & Elizabeth Garland, MD	Term Offered: Fall	3 credits

Justice is a major concern in theoretical ethics and political philosophy and a huge literature is devoted to trying to explain just what it entails. In this course our aim will be to examine a broad spectrum of issues in medicine, medical research, and public health that raise questions about justice. In light of these critical examples, we shall review and critique an array of philosophical views on justice. Throughout the seminar we shall be engaged in two activities: (1) using clinical dilemmas and health policies as touchstones for developing a clear understanding of justice, and (2) developing an understanding of how theories of justice apply in different public health and medical contexts. By going from practice to theory and from theory back again to practice we shall advance our understanding of the theoretical literature as well as the requirements of justice in public health, medicine and other areas of the social world.

This course will begin with an examination of the allocation of medical resources that raise questions about justice. It will then move on to examine contemporary work on justice and review of some theoretical work by authors who focus their attention on justice in medicine (e.g., Norman Daniels and Paul Menzel). As the seminar progresses, we shall develop an understanding of how the U.S. happens to have developed the mechanisms that we now have for the delivery of health care. We shall examine how medical resources are actually distributed here, elsewhere, and globally, and in various contexts. We shall consider ways in which those allocations do and do not express justice. We shall also explore some of the problems that become apparent when you attend to the special needs of social groups (e.g., the poor, children, women, the elderly, African-Americans) and examine dilemmas and conflicts that are raised by issues such as the treatment of premature and compromised neonates and resource allocations during the COVID-19 pandemic.

MPH 6005 – LGB/TGD/Q+ Health: Research, Policies and Best Practices
(Formerly MPH 0016)

Course Director: Barbara Warren, PsyD	Term Offered: Spring II	3 credits

LGBTQI people have made considerable progress in securing equal rights, from open military service to marriage equality. Polling data indicates the general public has increasingly positive views of LGBTQI civil rights. Despite this, LGBTQI persons still face discrimination, stigma and exclusion in many policy arenas and significant health disparities. Development of an evidence base for LGBTQI health interventions remains in critical need of more dedicated efforts. This course reviews the demographics and diversity of LGBTQI populations; advances and gaps in LGBTQI health knowledge and research; and policies and strategies in public health practice towards achieving fuller health equity for LGBTQI persons.

MPH 6006 – Substance Use & Public Health
(Formerly MPH 0211)

Course Director: Elizabeth (Betty) Kolod, MD, MPH	Term Offered: Spring I; Every other year	2 credits

We are facing a public health crisis of substance use disorders (SUDs) across NYC and the country. In the US, approximately 20.4 million people ages 12 and older had an SUD diagnosis in the past year, according to the 2019 National Survey on Drug Use and Health. Addiction touches the lives of children, adolescents, and adults across all racial, ethnic, and socioeconomic backgrounds.

This course will explore the public health impact of several important SUDs and evidence-based interventions to mitigate harms associated with substance use. Topics include substance use and mental health, tobacco control, the epidemic of SUDs in NYC, cannabis and teens, drug decriminalization, overdose in the ER, binge drinking on college campuses, environmental and genetic risk factors for opioid addiction, and others.

This seminar will be problem-based and composed of lectures from experts and exposure to people who use drugs, with emphasis on research, evidence-based practice, and policy. Course assignments include attendance and reflection on an SUD group therapy session (12-step or other model) and a presentation on a controversial area of addiction.

Students who successfully complete this course will be able to:

- Assess the social, cultural, political, economic, and environmental factors that promote or prevent substance use in an individual or community
- Design an intervention or program to prevent or manage substance use and SUDs on a population level
- Identify the behavioral and neurobiological effects of substance use and SUDs

MPH 6007 – Life Cycle of Violence: Implications for Public Health
(Formerly MPH 0212)

Course Director: Andrea Rothenberg, MS, LCSW	Term Offered: Spring I	2 credits

This course is inactive for AY 24-25.

According to Healthy People 2020, "Acts of violence are among the top 15 killers of Americans of all ages." Once thought of solely as a criminal justice issue, violence prevention and intervention have been embraced as a major public health issue. The television drama, Law and Order: Special Victims Unit (SVU), claims to be "fictional" and states that their show "does not depict any actual person or event." Yet many episodes strongly resemble real-life situations "ripped from the headlines," with a few added twists and turns to enhance the plot! Students will view SVU episodes and read peer reviewed articles to guide interactive discussions on the impact of violence over the course of the lifespan on health and wellbeing. Insights from this course will drive more thoughtful and informed practice when working with this important leading health indicator.

MPH 6008 – Emerging Issues: Women Sex & Reproductive Health and Rights
(Formerly MPH 0215)

Course Director: Andrea Rothenberg, MS, LCSW	**Term Offered: Fall**	**2 credits**

This course is inactive for AY 24-25.

Sexual and Reproductive Health and Rights (SRHR) of women are integral to their overall health and wellbeing. According to the United Nations Population Fund (2021),"a woman who has control over her body is more likely to be empowered in other spheres of her life. A woman—or adolescent girl— with little bodily autonomy is less likely to have control over her home life, her health and her future, and less likely to enjoy her rights." Multiple theoretical frameworks will be presented to explore pertinent SRHR issues including body autonomy, gender identity and gender roles, LGBTQ health, women and Covid-19, gender-based violence and abortion. Special emphasis will be placed on discussing the impact of poverty, ethnicity, class and institutional racism experienced by many marginalized populations which may deprive them from seeking and obtaining adequate health information, access to quality health services and free to fully participate in the expression of their sexuality.

MPH 6009 – Health Equity, Literacy, and Communications
(Formerly MPH 0217)

Course Director: Maya Korin, PhD, MS, Elizabeth (Betty) Kolod, MD, MPH & Alyssa Gale, MPH	**Term Offered: Summer**	**1 credit**

This course is inactive for AY 24-25.

This course provides an overview of the linkage between health equity efforts and health literacy and communication. The course content will focus on the social determinants of health and how municipal, state, and federal policies influence downstream health. The course will familiarize GPM residents with NYC and East Harlem structural features and the community-based organizations that promote resilience. Students will appraise the role of health literacy in conveying health risk and participate in a workshop to create patient facing materials. In addition, some lectures will focus on incorporating community voices and different ways in addressing racism through clinical care. As part of the curriculum, residents will collaborate with the Mount Sinai Department of Health Education's Public Health and Racial Justice Program, an innovative education and empowerment program for youth of color aged 16–24 years. GPM residents will lead small group discussions with youth participants on training and careers in public health.

Open to MD/MPH Students, Residents, Fellows. All others must seek Course Director's approval.

MPH 6010 – Health & Literacy: Improving Health Communication Efforts
(Formerly MPH 0210)

Course Director: Maya Korin, PhD, MS	Term Offered: Spring II	3 credits

The issue of health literacy is critically important to the development of effective health communication strategies and outreach. National evaluations of literacy have raised serious concerns about the ability of nearly half the U.S. adult population to access, understand, and apply health communication messages (NAAL 2003), including those messages found in health information, related to health care services, and exchanged during health provider/patient interaction. This course explores the link between literacy and health in the US and how poor health literacy impacts accessing, understanding, and applying health communication messages. Course participants will learn how to take health literacy into account in their work as public health practitioners by understanding the consequences of low health literacy in health outcomes, conducting health literacy loads of spoken and written material, and developing skills to communicate health more effectively across a variety of settings and contexts.

MPH 6011 – Introduction to Medical Anthropology
(Formerly MPH 0203)

Course Director: Victor M. Torres-Vélez, PhD	Term Offered: Spring II	3 credits

Biomedicine is defined as the medical science that applies biological and physiological principles in clinical practice to cure patients from disease. For biomedicine, the cause of sickness is found at the cellular level--that is when a pathogen or germ alters the natural balance of the organism. To restore health is to trace and eradicate the physiological entity affecting the organism. In Western societies, this scientific understanding of disease is not only at the core of biomedical practice but also of people's imagination. To enter as a patient in the realm of biomedicine is to enter the realm of science, factuality and expert knowledge. Because scientific practice deals with "Nature," science is not only perceived as objective but as removed from culture. This course will attempt to reveal biomedicine as a cultural system. Through the lenses of medical anthropology, this course will examine:

- The emergence of biomedicine at the eve of the industrial revolution. We will be looking at the rise of biomedicine not as an institution only working within the confines of the diseased body. Rather, we will understand biomedicine as a cosmological project encompassing the whole of society, even when it is done through minute disciplining of the body. That is shaping the boundaries of what is possible, what can be seen and what constitutes reality.
- The different roles played by medical anthropologists in relation to biomedicine. While originally medical anthropologist's relationship with biomedicine was one of "translation" - that is how to make the "exotic other" comply with biomedical interventions - this role has dramatically changed. We will emphasize not on anthropologists who are primarily working with biomedicine but rather those making biomedicine their object of study. We will survey some of the main debates within the discipline.
- A wide array of ethnographies trying to answer the question of whether biomedicine is outside of culture. Particularly, we will be looking at the ways in which biomedical practice constructs its subject of study. We will review medical practices' core philosophical assumptions through some comparative cross-cultural analysis.
- The ways in which biomedicine particularly target women's bodies while upholding a malecentered ontology that disregards women's embodied experiences.
- The ways in which the political-economic organization of capitalist production creates health disparities. We will study the case of Haiti, situating their health crises not at the cellular level, but at

the crossroads of Neoliberalism and a tortuous history of U.S. economic, political and military interventions.

MPH 6012 – Racism and Public Health
(Formerly MPH 0705)

Course Director: Malika Garg, MD, MS	Term Offered: Spring II	3 credits

The Racism and Public Health will introduce the history of racism in the United States and its impact on social determinants of health. The Course aims to provide a contextual framework for examining structural racism as one of the root causes of health disparities. The Course will provide an overview of how social determinants of health not only impact an individual's health outcomes but also have an impact on future generations. This Course will highlight long-standing racism and racist policies in the United States that have adversely impacted BIPOC communities.

The Course will introduce students to the concepts of racism in healthcare, structural racism, individual racism, and interpersonal racism. The Course content will discuss how public health policies, their implementation, budget and funding, impact the social determinants of health. By examining the ways that social determinants of health are being conceptualized by epidemiologic and social science tools, such as fundamental cause theory, structural violence, intersectionality and capabilities frameworks, students will explore ways to operationalize these understandings into their public health research and program intervention strategies.

The goal will be to shift the conversation from race to racism as the root cause of health inequities in the Black population. This Course will be conducted via a series of didactics, case discussions, guest lectures and group discussions as well as a round table conference of experts in the field. The students will also be encouraged to participate in a survey to discern their understanding of the subject matter. Students may be required to participate in focus groups to ensure that the Course is being conducted in a respectful environment which is fostering learning and growth.

MPH 6013 – Global Mental Health
(Formerly MPH 0703)

Course Director: Craig Katz, MD & Jan Schuetz-Mueller, MD	Term Offered: Fall	3 credits

"There is no health without mental health." While millions of people struggle with mental disorders, sufferers in resource-limited areas receive little or no treatment. This course will describe how to strategically approach global mental health planning and implementation for scaling up mental health services within a public health framework. It will rely on a model known as the Wheel of Global Mental Health, which encompasses seven interdependent elements that together encompass the goals, resources, and dynamics integral to scaling up. Questions raised by the COVID-19 pandemic can also be expected to shape this year's course.

MPH 6014 – Humanitarian Aid in Complex Emergencies
(Formerly MPH 0707)

Course Director: Annie Sparrow, MD	Term Offered: Spring I	3 credits

This is an upper level global health course informed by the course director's field experience and ongoing role as advisor to the Director-General of the World Health Organization. This course will explore current public health and humanitarian crises and address the tensions between aid practitioners and academics, between countries and international agencies, health and human rights using historical and current case studies.

How should international medical and relief efforts respond to modern humanitarian emergencies that have become chronic, expensive, political and unpopular with governments increasingly focused on populism and protectionism to open borders and empathy? In armed conflicts, how do officials delivering humanitarian aid ensure that in-kind assistance is meeting the needs of people affected rather than providing a source of subsistence to warring factions? How should aid efforts address a crisis like the Ebola outbreak in the Democratic Republic of Congo when parts of the local population see the international response as more a source of jobs than medical care? Can international public health efforts develop the trust needed to succeed in such situations if they focus primarily on those diseases seen as a threat to threaten the global North -- Ebola, polio, pandemic flu rather than those that are the biggest killers in the global South - TB, malaria, and HIV? For the Covid-19 pandemic, are public-health officials striking the right balance in the global South between a reliance on technical innovations and the need to develop basic health care? Does that balance shift as we consider future pandemic threats such as anti-microbial resistance? Is the World Health Organization fit for purpose in addressing emerging threats, and if not, what modifications would make it more effective? In particular, what would make the WHO more effective in addressing the instinct of many governments to cover up unusual outbreaks of infectious diseases? For the first time, people understand what public health means, what human rights are, and the relationship between health and human rights. The pandemic has also brought into sharp relief the limitations of our current response -- surveillance, contact tracing and vaccinations. This course will examine the international public-health response to a range of humanitarian crises, including those related to outbreaks, armed conflict, natural disaster, and climate change. Other issues it will examine include the politicization of the international response and the role of international organizations such as the World Health Organization and other United Nations agencies, of non-governmental organizations such as International Committee of the Red Cross (ICRC), Doctors without Borders. Students will develop critical thinking and hone communication skills in particular writing skills such as opinion pieces in order to inform and engage in public debate.

MPH 6015 – Global Environmental Change
(Formerly MPH 0710)

Course Director: Cappy Collins, MD, MPH	**Term Offered: Spring I**	**3 credits**

Climate change is not a single problem, but a lens through which to view myriad changes to our environment that will determine the future for humans on this planet. Changes to biodiversity, hydrological systems, land use, waste management, energy production, distribution of environmental toxicants; these and more are all part of the larger category of global environmental change.

This course will focus on how global environmental change is affecting human health, presenting major challenges to physicians, scientists, institutions, governments and communities. There are solutions, and public health messengers must be informed to bring those solutions to the decisionmakers in our neighborhoods and around the world.

MPH 6016 – Medical Law and Ethical Dilemmas in Health Care
(Formerly MPH 0713)

Course Director: Alexander S. Preker, MD, PhD	Term Offered: Spring I	2 credits

Human rights abuses are pervasive and have both obvious and subtle health consequences. They also need to be understood from different angles: how they affect individual health (including psychological health) as well as population and community health; how human rights abuses involve ethical, scientific, political, social, and cultural considerations; and how the field of public health can address human rights abuses in multiple ways, including advocacy and testimony, influencing health related practices, education, documentation and accumulation of data.

This course is designed to raise students' awareness of human rights abuses and their effects on health; to describe how human rights abuses adversely impact health; to introduce the epidemiology of human rights abuses; and to consider how disciplines within Public Health can address (and sometimes participate in) human rights abuses. The course covers the ethical and political foundations of Human Rights, how we know human rights abuses are occurring (especially the epidemiology of human rights abuses), and specific health ramifications of pandemics, torture, forced migration and disparities. In addition, public health implications of human rights abuses will be discussed around special topics: pandemic response, children, gender, human rights law, and the role of health care providers in human rights abuses (from overt examples of participation in torture and genocide to more complex realms where public health imperatives may conflict with human rights, as with some forms of public health surveillance).

MPH 6017 – Clinical, Occupational & Environmental Medicine
(Formerly MPH 0522)

Course Director: John Meyer, MD, MPH & Rabeea Khan, MD, MPH	Term Offered: Summer Intensive - Two weeks	3 credits

Environmental and occupational exposures known to cause human disease are examined from the public health framework of exposures and etiology, clinical diagnosis, and prevention. Regulatory and other approaches to prevent and reduce exposure will be discussed. Important public health and policy implications of workplace and environmental exposures will be examined.

The course is targeted toward those training or working in health care, and is limited to residents, physicians and medical students except with the permission of the Course Director.

This course can be substituted for MPH 1005 (formerly MPH 0500) Introduction to Environmental Health.

MPH 6018 – Toxicology
(Formerly MPH 0515)

Course Director: Corina Lesseur, PhS	Term Offered: Spring II	3 credits

This course provides an introduction to the major concepts in toxicology with particular emphasis on agents with public health relevance including metals, pesticides, air pollution, drugs of abuse, medication, and stress. The curriculum is designed to make toxicology accessible to students with broad scientific backgrounds including those outside of the biological science disciplines. Students will learn the basic principles of toxicology, as well as review target organs systems, contaminants, and mechanisms of actions of certain classes of compounds. Specific target organ toxicities will include hepatic, renal, cardiovascular, pulmonary,

neuronal, developmental, reproductive, and endocrine systems. We will use in-class exercises and small groups to discuss recent publications, apply concepts, and understand the current knowledge of specific toxicological agents and their effects. This course is designed to present toxicology as an interdisciplinary science in public health.

MPH 6019 – Communitology
(Formerly MPH 0525)

Course Director: Cappy Collins, MD, MPH & Angela Donadelle	**Term Offered: Spring II**	**3 credits**

Life expectancy on the Upper East Side is 86 years compared to 77 years in East Harlem. Why should this be? This course introduces the learner to the root causes of health disparities confronting resource-poor communities, with particular focuses on children, the environment, and social determinants of health (SDHs).

We cover topics ranging from chemical exposures; qualities of the built environment; the health effects of climate change; and the mechanisms of toxic stress and epigenetics. We cover basic principles of exposure assessment; skills in pediatric environmental exposure history taking; and the adverse effects of environmental exposures on child neurodevelopment. Students learn how to design risk communication strategies for environmental exposures targeted to a specific group of children, access pediatric health reference material, apply state-of-the-art clinical evidence in the formulation of public health policy, and advocate for child health. The course format is participatory, and includes discussing peer-reviewed literature, lectures and clinical case scenarios.

This course will be capped at 15 students. Registration will be based on first come, first-served basis.

MPH 6020 – Nutritional Epidemiology
(Formerly MPH 0401)

Course Director: Xiaotao Zhang, MD PhD & Dania Valvi, MD, PhD, MPH	**Term Offered: Spring I**	**3 credits**

This course provides an overview of the principles and methods used to assess dietary intake and patterns and nutritional status in epidemiology research. Students will learn to identify and apply rigorous methods for assessing diet and nutritional status in adult and children study populations. Topics covered include methods of dietary assessment and nutritional status in adults and children, methods for controlling for measurement error, misclassification, and bias in nutritional epidemiology studies, and modern nutritional epidemiology applications. Through group class assignments, homework, and a final nutritional epidemiology project, students will also obtain practical skills in collecting, analyzing, and interpreting nutritional data for epidemiologic and clinical research.

Pre-requisites:
MPH 1004 (formerly MPH 0400) Introduction to Epidemiology

MPH 6021 – Zoonoses: An Emerging Public Health Issue
(Formerly MPH 0010)

Course Director: Stephanie Factor, MD, MPH	Term Offered: Spring II	3 credits

Zoonoses, diseases transmitted from animals to humans, are increasingly being recognized as emerging or re-emerging disease threats to public health. This course will explore the interactions between physicians, veterinarians, and public health professionals; provide an understanding of the public health consequences of these diseases; and explore preventive measures. Finally, we will set the framework for discussions of agents of bioterrorism and the public health response to these threats. The course attracts top speakers from across the country in the fields of public health, infectious diseases, veterinary medicine, and the biomedical sciences.

MPH 6022 – Epidemiology of Infectious Diseases
(Formerly MPH 0410)

Course Director: TBD	Term Offered: Spring II	3 credits

This course is inactive for AY 24-25.

Epidemiology of Infectious Diseases builds upon the concepts presented in Introduction to Epidemiology (P400), stressing the importance of considering the host, environment and disease agent in transmission dynamics. The nineteenth and twentieth centuries witnessed advances in prevention, treatment, and study of infectious diseases and the misconception that infectious diseases were disappearing. The study of infectious diseases leads to the continual development of vaccines, antibiotics, and technology, prompting epidemiologists to develop more advanced methods to monitor disease, investigate patterns of disease transmission, and evaluate innovative prevention modalities. The past thirty years have brought to light both new and re-emerging problems in the epidemiology of infectious diseases, including HIV, SARS, avian influenza, arboviruses, antimicrobial resistance, and the threat of bioterrorism.

This course will enable students to gain an understanding of the principles of infectious disease epidemiology, including modes of transmission, quantification of occurrence and risk, and methods for preventing disease at the population level. Students will receive a number of disease-specific lectures from public health practitioners who conduct surveillance for and epidemiologic studies on various infectious diseases. Students will also participate in classroom exercises, during which they will investigate an outbreak, create surveillance plans, present evidence of a disease threat, and recommend prevention and control measures.

Pre-requisites:
MPH 1004 (formerly MPH 0400) Introduction to Epidemiology
MPH 1002 (formerly MPH 0300) Introduction to Biostatistics

MPH 6024 – Epidemiology of Cancer & Chronic Diseases
(Formerly MPH 0416)

Course Director: Mathilda Chiu, ScD	Term Offered: Fall	3 credits

The course will cover substantive and methodological issues in the epidemiology of chronic diseases, including cancer, chronic respiratory diseases, neurodegenerative diseases, and aging. Students will be presented with examples of descriptive and analytical epidemiology studies in each of these areas; aspects

such as disease registration and its contribution to epidemiology research, estimates of attributable fractions, and preventive strategies will be also addressed. The course will complement the series of methodological courses offered within the epidemiology Concentration, by providing a framework to incorporate research in chronic disease etiology and control.

Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology
MPH 2000 (formerly MPH 0412) Epidemiology II

MPH 6025 – Mental Health in the Modern Age
(Formerly MPH 0417)

Course Director: Guy Montgomery, PhD	**Term Offered: Spring I**	**3 credits**

Mental health is a critical component for high quality of life. Poor mental health is in and of itself aversive, and can lead to poor physical health and in some cases even death. The purpose of this course is to develop understanding modern conceptualizations of mental health on a population level. This will be accomplished by: studying mental health within the context of its historical perspectives, providing foundational learning on the major classifications of mental health disorders and their impact on society, and providing insights into what is, and what factors lead to, "good" or positive mental health.

Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology

MPH 6026 – Reproductive & Perinatal Epidemiology
(Formerly MPH 0418)

Course Director: TBD	**Term Offered: Spring I**	**3 credits**

This course is inactive for AY 24-25.

In this course we will study the epidemiology of human reproductive function, pregnancy and pregnancy outcomes and the methodologic issues involved in studying these. Topics include: basic biology of male and female reproduction, male and female infertility, pregnancy outcomes, assisted reproduction, and factors (environmental, social and occupational) that impact reproductive function and pregnancy outcomes.

Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology

MPH 6027 – Big Data Epidemiology: Intro to OMICS Research
(Formerly MPH 0422)

Course Director: Dania Valvi, MD, PhD, MPH, Megan Niedzwiecki, PhD, & Vishal Midya, MStat, PhD	**Term Offered: Spring II**	**3 credits**

Omics is an emerging, multidisciplinary, and rapidly evolving field that has started to impact both clinical practice and public health and holds promise to significantly improve precision medicine. Omics encompasses many molecular biology domains including genomics, epigenomics, transcriptomics,

proteomics, metabolomics and exposomics. These molecular domains can offer a more nuanced perspective on how multiple exposures (e.g., environmental, lifestyle, social factors) affect health compared with traditional research approaches. However, omics datasets are large (tens of thousands of variables or more), resulting in analytical challenges that require adaptation of existing epidemiology designs and methods. This course will provide an overview of omics research areas and applications, latest omics epidemiology advances, and hands-on training in big omics data analysis.

Pre-requisites:

MPH 2000 (formerly MPH 0412) Epidemiology II
MPH 1002 (formerly MPH 0300) Introduction to Biostatistics
MPH 2002 (formerly MPH 0812) Applied Linear Models I

Recommended:

BIO 6300 Introduction to R Programming

MPH 6028 – Epidemiology IV
(Formerly MPH 0425)

Course Director: Paolo Boffetta, MD, MPH	Term Offered: Fall	3 credits

This advanced course in epidemiology is built around the overarching themes of the contribution of epidemiology to causal inference, and strategies for selection of study populations, prevention, control and quantitative assessment of bias, and options in study design and statistical analysis.

Pre-requisites:

MPH 1004 (formerly MPH 0400) Introduction to Epidemiology
MPH 2000 (formerly MPH 0412) Epidemiology II
MPH 2001 (formerly MPH 0420) Epidemiology III

MPH 6029 – Introduction to Probability
(Formerly MPH 0801)

Course Director: Rose Calixte, PhD	Term Offered: Fall	3 credits

This course introduces probability models emphasizing applications in public health and medicine. In addition to presenting basic probability theory and models, a variety of topics important in statistics will be covered, including: random variables; discrete and continuous probability distributions; conditional probability, joint probability, expectation and variance; independence; sampling distributions, combinatorics, and permutations.

MPH 6030 – Statistical Computing with SAS
(Formerly MPH 0802)

Course Director: John Doucette, PhD	Term Offered: Fall, Spring I	2 credits

This course provides students with the skills needed to utilize SAS systems for data management in order to prepare datasets for statistical analysis. In addition, procedures that are used to conduct basic statistical analyses and produce graphical output will be covered. Students will be given hands-on training using sample data provided by the instructor as well as (optionally) data from their own work.

Recommended Pre-requisites:
MPH 1002 (formerly MPH 0300) Introduction to Biostatistics

MPH 6031 – Introduction to Qualitative Research Methods
(Formerly MPH 0305)

Course Director: Maya Korin, PhD, MS	Term Offered: Spring I	3 credits

Qualitative research involves the collection and rigorous analysis of observations, interviews, and other records of human activity so that we can come to a richer understanding of structures, processes, and perspectives that drive or shape human behavior, particularly when it comes to health. This course is designed to introduce students to qualitative research methods and will use a combination of didactic, interactive, and applied techniques to teach knowledge and skills relevant to qualitative research. The course emphasizes practical skills of qualitative research design, data collection (i.e., interviewing, focus group facilitation) and data analysis. By the end of the course students will develop skills in how to formulate appropriate qualitative research questions, determine which qualitative data collection method is most appropriate, collect qualitative data using interviews and focus group discussions, and analyze qualitative data. Students will be exposed to different styles of presenting qualitative research results and will consider different ways in which qualitative data is used in practice

MPH 6032 – Public Health Lab: How to Solve Problems in Public Health
(Formerly MPH 0012)

Course Director: Cappy Collins, MD, MPH	Term Offered: Fall	3 credits

How do we turn public health theory into meaningful change in the world? How can you do the most good for the problem you care about? The answers exist! This course will review fundamental concepts in public health practice and translation into successful actions. These concepts and practices can guide program and policy developments in the service of helping populations, and they accommodate variables including the scope of the efforts, the level of involvement of the population, the utilization of other stakeholders and the sustainability of the efforts. Students will develop their own advocacy project proposals. Empowering other people starts with empowering oneself. Pre-requisite: Completion of 1-2 terms in the Program.

MPH 6033 – AI in Public Health
(Formerly MPH 0022)

Course Director: TBD	Term Offered: Fall	1 credit

This course will use a journal club-style to introduce students to the rapidly evolving applications of artificial intelligence (AI) in public health research and practice. Through critical reading, presentation and discussion of state-of-the-art peer-reviewed articles of original studies and reviews, students will critically evaluate and discuss the opportunities, limitations, risks, ethical implications, and current and future applications of AI methods and tools such as machine learning and natural language processing in public health research, disease surveillance, global health strategies, public health data analysis, and public health education and communication.

MPH 6034 – Geographic Information Systems in Public Health
(Formerly MPH 0005)

Course Director: TBD	Term Offered: Spring I	3 credits

This course is inactive for AY 24-25.

Geographic Information Systems (GIS) in Public Health is a hands-on course designed to introduce students to GIS from a public health perspective. Students will learn the fundamentals of health geography, spatial analysis, and ESRI's ArcGIS software through lectures, discussions, lab exercises, quizzes, a final exam, and a final paper. The course exercises are designed to provide students with an opportunity to begin investigating spatial distribution of, and relationships among, environmental, demographic, and health data.

Note: access to a windows environment (e.g., laptop running windows or a Mac with a windows emulator) is necessary for the lab assignments.

MPH 6035 – Digital Transformation in Healthcare and Medical Research with Integrity
(Formerly MPH 0017)

Course Director: TBD	Term Offered: Spring II	3 credits

This course is inactive for AY 24-25.

The ways that medical professionals and healthcare systems use technology not only shape who they serve but also the quality of care that patients receive. How practitioners deploy technologies in day-to-day care and crises is critical to preserving the public's trust in the field, which in turn is essential for effective public-health initiatives and population health interventions. At the same time, extensive research has demonstrated the propensity of digital and predictive tools to exacerbate existing forms of healthcare inequality. This is not a class in data analysis methods, nor will it offer instruction in how to build healthcare tools with existing or projected digital technologies. Instead, this class will guide students in exploring what 'good' looks like for digital technology deployment in medicine. What knowledge and skills do emerging medical professionals need in order to participate in articulating and operationalizing digital systems for medicine that strengthen, rather than undermine, their duties as health practitioners? This gateway course provides an overview of decision-making and strategic planning surrounding digital tools for medical and public health professionals. Learning through a mix of scholarly and journalistic readings, guided discussions, and instructor and guest lectures, students will be introduced to three critical areas of digital transformation in the practice of medicine: (1) the role of communication technologies in intermediating access to medical information and services; (2) the use, and re-use of data collected through medical care, especially using third-party platforms such as electronic health records (3) the implications of the adoption of machine learning tools in healthcare provision Across these themes, this entirely new course will prepare students to understand the implications of the digital transformation of medicine and research and navigate their core duties as health professionals by equipping them with a set of analytic tools and critical knowledge that situate digital tools and services for implementation science and influence health policy at a high level. This unique course is open to medical students (years 1-4), Master of Public Health, Master of Health Administration and the Health Care Delivery Leadership Program in the Graduate School of Biomedical Sciences.

MPH 6036 – Strategic & Program Management
(Formerly MPH 0103)

Course Director: TBD	Term Offered: Spring II	3 credits

This course is inactive for AY 24-25.

This course is an introduction to understanding; the competencies, roles and responsibilities of public health and health managers; health organizations, which are complex and changing in response to community needs and to changing environments; the skills required to establish and maintain organizational culture and organizational change; and talent and team management. Through readings, class discussion and the analysis of case studies, students, will have an opportunity to explore and identify key management and leadership challenges impacting public health and health; formulate and evaluate alternative solutions to problems; learn verbally and in writing to present analysis of managerial plans and proposals. The course will emphasize skill development in the management of mission, strategy, operations and the business aspects of health organizations.

MPH 6037 – Healthcare in Communities & Public Sector
(Formerly MPH 0104)

Course Director: Richard Roberts, JD	Term Offered: Spring II	3 credits

A major focus of this class is on understanding how community life and health are related. Students will learn how to analyze communities, compare data regarding the health status of communities and to compare selected communities to each other. Case material will be used to emphasize the multiple ways one can assist communities as a whole and those at risk for health problems. Exemplars will be offered by guest lecturers involved in community change. Social and economic factors will be identified that affect community health status.

MPH 6038 – Health Economics
(Formerly MPH 0105)

Course Director: Alexander S. Preker, MD, PhD	Term Offered: Spring I	3 credits

The intent of this course is to train future public health practitioners on the economic and political questions that emerge in the process of developing health systems. The course looks in detail at the US health care system, including its history, evolution, achievements and continued challenges from an economic perspective. The various sessions during the course will review core economic principles applied to the role of governments, the private sector and the competitive marketplace. The course will provide an overview of traditional microeconomic theory and practice as applied to demand, supply, competition, monopoly, and social welfare. It will drill down on topics such as role of governments, private sector, market competition, government failure and market failure. Special sessions will be devoted to topics on clinical services, non-clinical services, the health care workforce, health financing, the health related manufacturing sectors (pharmaceuticals, medical technology and information technology) and leadership/health management. Special attention will be paid to the implication of the Covid 19 crisis for the economic function and performance of health care system and its major components. Students who successfully complete this course will be able to: Analyze the key policy and public health challenges faced by the US and other health care systems using economic principles, market analysis and health policy formulation Design key policy recommendations to address some of the public health challenges faced by vulnerable population groups that are consistent with underlying economic principles economic principles, market

analysis and health policy formulation Apply the principles of economic evaluation to selected problems in the health sector and health industry verticals. The major course output will be guided, semester-long exercises in analyzing and developing strategic development plans from a public health professional's perspective to guide political and economic decision making. The focus on health systems is a concrete means to understand the more general competencies involved in the application of economic analysis, which include political, financial, technical and organizational skills. The course will link to the ongoing health care reform debate to help participants understand the underlying economic issues raised by the reforms.

MPH 6039 – Accounting & Budgeting for Public Health Administration
(Formerly MPH 0107)

Course Director: Frank Cino, MPH, CPA	Term Offered: Spring II	3 credits

Financial statements enable managers to evaluate the performance of an organization and assess its financial position. Budgets, based on forecasts, take the form of projected statements and serve as an important managerial tool for planning and control purposes. This course provides an introduction the accounting, budgeting and financial reporting techniques commonly used in the health care and not-for-profit environment. Emphasis is placed on enabling students to become comfortable with financial analysis, budgets and commonly-used financial terminology so that they can effectively address financial matters they will encounter in leadership roles in health care and not-for-profit organizations.

MPH 6040 – Comparative Health Systems
(Formerly MPH 0108)

Course Director: Alexander S. Preker, MD, PhD	Term Offered: Spring I	3 credits

The recent introduction of the Affordable Health Care Act and further proposed reforms under the American Health Care Act has had and will continue to have a major impact on the delivery of healthcare in the USA. The course will review major trends in health care in the US and use a comparative health systems approach to explore reform options based on what has worked well and not so well in both the USA and other OECD countries like the UK, France Germany, Canada, and Australia. The course will explore each country's geography and culture, the history of its health system, followed by a detailed analysis of evaluation of cost, quality, access and innovation. The courses is designed to be accessible by students of health administration, public health, nursing and other allied health professions. A major course output will be a guided, semester-long exercises in analyzing a health system. Students select a term project for expanding coverage for poor and vulnerable populations in a sample country of their choice. The course will use a health systems approach to strengthen more general competencies in the application of systems analysis, using political, financial, technical and organizational skills. The course will be particularly useful for students that may want to transition to a high level policy career or executive leadership and management role within health system.

MPH 6041 – Organizational Behavior & Human Resources
(Formerly MPH 0111)

Course Director: Matthew Baney, MS	Term Offered: Spring I	3 credits

Human resource management in health organizations and the relationship between HR, organizational strategy, and organizational behavior is the focus of this course. We will analyze human work behavior at the individual, interpersonal, team and organizational levels. Included are topics such as motivation,

communication, group and team dynamics, leadership, decision-making, job and organization design, conflict management, organizational culture and identity, and organizational change. We will apply organizational behavior theory and explore the factors that affect behavior, performance, and job satisfaction of people working in organizations. The objectives of the course will be to understand the characteristics and processes of work organizations; to successfully develop management skills; to apply the skills of management and impact organizational behavior and performance.

MPH 6042 – Managed Care and Health Reform
(Formerly MPH 0120)

Course Director: Arthur Gianelli, MBA, MPH	Term Offered: Fall	3 credits

Following a brief survey of the 3000 year history of insurance, the course will focus on health insurance and reform in this country before examining the variety of techniques used by managed care organizations and various national health systems to balance health expenditures, access and quality of healthcare. Through weekly Socratic-type discussions about contemporary healthcare controversies, the course will help develop students' critical thinking about health policy alternatives and managerial decisionmaking. Feedback on short weekly essays, student presentations, and a final essay will help students improve their written and presentation skills.

MPH 6043 – Journal Club for Health Professionals
(Formerly MPH 0411)

Course Director: Rabeea Khan, MD, MPH	Term Offered: Full Year Course (only register in Fall)	1 credit

This course is for residents in specific ISMMS residency programs and meets once per month. This intermediate level Journal Club is intended for Preventive Medicine and Occupational and Environmental Medicine residents only. The course builds upon the Introductory Journal Club for residents and trains residents in the presentation of articles relevant to the public health specialties of environmental, occupational and preventive medicine. Each resident will be assigned a week to be responsible for selecting and presenting an article relevant to their area of specialization. The student may decide to invite a Mount Sinai faculty expert in the particular topic to provide additional commentary on the article. Prior to class, all students are required to read the article and complete a short critique form. All students are expected to participate in class discussions.

Pre-requisites:

Students must be residents in either the Preventive Medicine or Occupational and Environmental Medicine residency programs at ISMMS.
Others must obtain approval of the course director to enroll.

MPH 6044 – Seminar in Applied Preventative Medicine
(Formerly MPH 0021)

Course Director: Elizabeth (Betty) Kolod, MD, MPH	Term Offered: Full Year Course (register each term)	3 credits

This weekly seminar focuses on current local, national, and international issues in public health and preventive medicine. Discussions center on critical review of new published literature in public health and

include topics related to health policy, economic and legal issues, and the impact of these issues on the health of populations. There will be didactics on public health ethics, risk communications and preventive medicine research as well as critical review of enrolled student research or theses. On a rotating basis, each student is responsible for setting the agenda and chairing seminar discussions.

MPH 6045 – Public Health Conference
(Formerly MPH 0795)

Course Director: TBD	Term Offered: Spring II	1 credit

The Public Health Conference provides students with the opportunity to delve deeper into public health topics presented at the annual Public Health Research Day at ISMMS. Students will be required to attend and be active participants during the full day of events, which includes a keynote lecture, oral presentations, poster sessions, and networking opportunities. Course requirements include a 2-page reflection paper and a critical analysis of 3 poster presentations.

MPH 6048 – Independent Study
(Formerly MPH 0095)

Course Director: NA	Term Offered: Fall, Spring I, Spring II	1-3 credits

An Independent Study can be valued at one, two, or three credits. Each credit represents approximately 45 hours of work. Three credits are the maximum number of credits that may be awarded to any Independent Study. Please note that while the total hours committed to the pursuit of the Independent Study may be sufficient for more than three credits or more than one elective, students will not receive any more than three credits for one project/course of study.

An Independent Study is an elective option, providing the student with an opportunity to delve more thoroughly into an area of public health that is of specific interest to him/her. An Independent Study must be a unique experience. Material covered during an independent study project should be highly targeted and not simply a review of the regularly offered coursework. Each student may complete no more than two independent study projects.
Eligibility - Students with more than one outstanding Incomplete at the time of the proposal submission may not be eligible to complete an Independent Study. Restrictions - It is important to note that independent study projects should not be attempts to take MPH courses that are offered routinely during the academic year at times that are more convenient for the student. Independent study projects cannot exempt students from core course requirements. Steps towards formalizing an Independent Study Identify and meet with your Faculty Sponsor to discuss and plan the Independent Study. Complete the Independent Study Proposal Form. Submit the Independent Study Form to the Academic Program Office for approval. Once approved, complete the project/course of study. Complete the Independent Study Postscript Report. Request that your Faculty Sponsor review the Postscript Report and complete the Independent Study Evaluation Form. Submit completed Postscript Report and Evaluation form to the Academic Program Officer.

MPH 6049 – Maintenance of Matriculation (Formerly MPH 8001)		
Course Director: NA	**Term Offered: Fall, Spring I, Spring II**	**0 credit**
To maintain matriculation, students must either register for at least one credit-bearing course or register for MPH 8001 Maintenance of Matriculation for every term up until degree conferral. Maintenance of Matriculation allows students continued eligibility to earn their degree while not pursuing coursework. The MPH 8001 Maintenance of Matriculation registration is $333 per term for students in trimester programs. Please see the full Maintenance of Matriculation policy in the Student Handbook.		

MPH 6050 – Project Continuation (Formerly MPH 0098)		
Course Director: NA	**Term Offered: Fall, Spring I, Spring II**	**0 credit**
Register for Project Continuation if you are continuing your Culminating Experience project for more than 1 term, working full time on this effort. You can only register in the term following MPH 9002 (formerly MPH 0097) Culminating Experience registration.		

Applied Practice & Culminating Experience Courses

MPH 9000 – Applied Practice Experience (Formerly MPH 0092)		
Course Director: NA	**Term Offered: Fall, Spring I, Spring II**	**3 credits**
Students should complete at least 15 credits of MPH coursework before starting the Practicum. The MPH Applied Practice Experience provides the student with an opportunity to translate theory into practice within a public health setting. The Applied Practice Experience Proposal must be submitted to the Office of Public Health Practice for approval prior to the beginning the experience. Students may register for MPH0092 after receiving approval on the APE Proposal. This registration is not a course that meets, instead it is a registration reflecting the time, energy, and advisement involved in the degree requirement.		

MPH 9001 – Culminating Experience Seminar (Formerly MPH 0023)		
Course Director: Cappy Collins, MD, MPH	**Term Offered: Fall, Spring I, Spring II**	**1 credit**
Students must have their Culminating Experience Statement of Support and Project Outline submitted to the Program Office before starting this course. This seminar is designed for second year students who will be completing Culminating Experience (thesis, manuscript, or capstone). These works are more than a paper - They are major independent projects that requires you to design, implement, and present professional work of public health significance. This course		

will help you design your Culminating Experience, start writing, and give and receive feedback from peers. The course is heavily interactive. We will work with materials provided primarily by the students. By the end of the term, you should be ready to complete your Culminating Experience.

Pre-requisites:
MPH 1003 (formerly MPH 320) Research Methods

MPH 9002 – Culminating Experience
(Formerly MPH 0097)

Course Director: NA	Term Offered: Fall, Spring I, Spring II	3 credits

The Culminating Experience provides the student with an opportunity to synthesize, integrate and apply the skills and competencies they have acquired to a public health problem. Students may choose to complete a Thesis, First Author Manuscript or Capstone to satisfy the Culminating Experience.

Please refer to the MPH Culminating Experience Guide as a resource for the steps that need to be taken to fulfill the Culminating Experience requirement.

MPH 9003 – Research Seminar in Epidemiology for MPH Students
(Formerly MPH 0423)

Course Director: Stephanie Factor, MD, MPH	Term Offered: Fall	2 credits

Registration in Fall is for students taking the course in Fall and throughout Spring I.

This course is designed for second year students studying Epidemiology to provide direction and support for the development of their research proposal in preparation for the submission of the final degree requirement. To participate in this course, students must have identified an ISMMS Faculty advisor and a general area for their first-author manuscript or thesis project. Class activities will include: student-directed discussions of peer-reviewed journal articles in their project-related area of interest; presentations by graduates on his or her experience completing the degree requirement; and student-prepared presentations of their capstone research proposal. Discussions about how to lead a productive journal club, issues related to preparing a good research proposal, and how to prepare effective PowerPoint presentations and other data-reporting formats will be part of the course experience. Outside readings will be assigned as appropriate for the in-class discussions/presentations. Registration in Fall is for students taking the course in Fall and throughout Spring I.

Pre-requisite:
This course is restricted to second-year students in the Epidemiology Concentration.

MPH 9004 – Research Seminar in Epidemiology for MS Epidemiology Students
(Formerly MPH 0421)

Course Director: Francheska M. Merced-Nieves, Ph.	Term Offered: Spring II	2 credits

This course aims to help the MS in Epidemiology students develop effective written and oral scientific communications from their Culminating Experience. The course is divided into three main sections that

cover the creation of effective (A) scientific posters, (B) written communications in format of a scientific manuscript or a thesis, and (C) oral presentations of an epidemiology project. This is a highly interactive student-centered and student-led course. We will work in class with materials provided primarily by the students, including student poster, manuscript/thesis and oral presentation drafts. All students will be required to give and receive constructive feedback from other peers on how to improve their written and oral communications based on what they have learned in class. Students must have their Culminating Experience Proposal Outline signed by their faculty advisor and submitted to the Program Office before the first day of class and are strongly encouraged to write as much of their Culminating Experience materials as possible during this course.

MPH 9005 – Capstone I for MS Epidemiology Students
(Formerly MPH 1097)

Course Director: Francheska M. Merced-Nieves, Ph.D	**Term Offered: Fall**	**1 credit**
The Capstone provides the student with an opportunity to synthesize, integrate and apply the skills and competencies they have acquired to a public health problem. Students are expected to develop and submit project outline and description by the end of the fall term.		

MPH 9006 – Capstone II for MS Epidemiology Students
(Formerly MPH 1098)

Course Director: Francheska M. Merced-Nieves, Ph.D	**Term Offered: Spring I**	**1 credit**
The Capstone provides the student with an opportunity to synthesize, integrate and apply the skills and competencies they have acquired to a public health problem. Students are expected to submit a project progress report by the end of the Spring 1 term.		

MPH 9007 – Capstone III for MS Epidemiology Students
(Formerly MPH 1099)

Course Director: Francheska M. Merced-Nieves, Ph.D	**Term Offered: Spring II**	**1 credit**
The Capstone provides the student with an opportunity to synthesize, integrate and apply the skills and competencies they have acquired to a public health problem. Students are expected to submit final manuscript or thesis.		

Course By Term Offered

Fall Term Courses			
Course Code & Name	**Course Director**	**Credit**	**Couse Category**
MPH 1001 – Introduction to Socio-Behavioral Health (Formerly MPH 0201)	Maya Korin, PhD, MS	3	CORE
MPH 1002 – Introduction to Biostatistics (Formerly MPH 0300)	John Doucette, PhD	3	CORE
MPH 1002 DL – Introduction to Biostatistics (Formerly MPH 0300 DL)	John Doucette, PhD	3	CORE
MPH 1004 – Introduction to Epidemiology (Formerly MPH 0400)	Stephanie Factor, MD, MPH	3	CORE
MPH 3000 – Introduction to Global Health (Formerly MPH 0700)	Maria Rosa, DrPH	1	GLOB-H REQ.
MPH 4000 – Program Planning (Formerly MPH 0014)	Sophia Curdumi Pendley, PhD, MPH	3	GEN-PH REQ.
MPH 6000 – Introduction to Public Health (Formerly MPH 0001)	Cappy Collins, MD, MPH	1	ELECTIVE
MPH 6003 – Community Based Participatory Research (Formerly MPH 0019)	Sophia Curdumi Pendley, PhD, MPH	2	ELECTIVE
MPH 6004 – Social Justice in Public Health & Medicine (Formerly MPH 0007)	Rosamond Rhodes, PhD & Elizabeth Garland, MD	3	ELECTIVE
MPH 6008 – Emerging Issues: Women Sex & Reproductive Health and Rights (Formerly MPH 0215)	Andrea Rothenberg, MS, LCSW	2	ELECTIVE
MPH 6013 – Global Mental Health (Formerly MPH 0703)	Craig Katz, MD & Jan Schuetz-Mueller, MD	3	ELECTIVE
MPH 6024 – Epidemiology of Cancer & Chronic Diseases (Formerly MPH 0416)	Mathilda Chiu, ScD	3	ELECTIVE
MPH 6028 – Epidemiology IV (Formerly MPH 0425)	Paolo Boffetta, MD, MPH	3	ELECTIVE
MPH 6029 – Introduction to Probability (Formerly MPH 0801)	Rose Calixte, PhD	3	ELECTIVE
MPH 6030 – Statistical Computing with SAS (Formerly MPH 0802)	John Doucette, PhD	2	ELECTIVE
MPH 6032 – Public Health Lab: How to Solve Problems in Public Health (Formerly MPH 0012)	Cappy Collins, MD, MPH	3	ELECTIVE
MPH 6033 – AI in Public Health (Formerly MPH 0022)	TBD	1	ELECTIVE

MPH 6042 – Managed Care and Health Reform (Formerly MPH 0120)	Arthur Gianelli, MBA, MPH	3	ELECTIVE
MPH 6043 – Journal Club for Health Professionals (Formerly MPH 0411	Rabeea Khan, MD, MPH	1	REQ. FOR ISMMS RESIDENTS
MPH 6044 – Seminar in Applied Preventative Medicine (Formerly MPH 0021)	Elizabeth (Betty) Kolod, MD, MP	1	REQ. FOR PREV MED REISDENTS
MPH 6048 – Independent Study (Formerly MPH 0095)	NA	1-3	ELECTIVE
MPH 6049 – Maintenance of Matriculation (Formerly MPH 8001)	NA	0	MAINTAIN ENROLLMENT
MPH 6050 – Project Continuation (Formerly MPH 0098)	NA	0	CE CONTINUATION
MPH 9000 – Applied Practice Experience (Formerly MPH 0092)	NA	3	MPH APE REQ.
MPH 9001 – Culminating Experience Seminar (Formerly MPH 0023)	NA	1	GEN-PH, GLOB-H, PHDA REQ.
MPH 9002 – Culminating Experience (Formerly MPH 0097)	NA	3	MPH CE REQ.
MPH 9003 – Research Seminar in Epidemiology for MPH Students (Formerly MPH 0423)	Stephanie Factor, MD, MPH	2	EPI & BIO REQ.
MPH 9005 – Capstone I for MS Epidemiology Students (Formerly MPH 1097)	Francheska M. Merced-Nieves, Ph.D	1	MS in EPI REQ.

Spring I Term Courses

Course Code & Name	Course Director	Credit	Couse Category
MPH 1004 – Introduction to Epidemiology (Formerly MPH 0400)	Stephanie Factor, MD, MPH	3	CORE
MPH 1005 – Introduction to Environmental Health (Formerly MPH 0500)	Lauren Zajac, MD, MPH & Candace Tannis, MD, MPH	3	CORE
MPH 2000 – Epidemiology II (Formerly MPH 0412)	Maayan Yitshak-Sade, PhD	3	EPI & BIO REQ.
MPH 2002 – Applied Linear Models I (Formerly MPH 0812)	John Doucette, PhD	3	EPI & BIO REQ.
MPH 3001 – Planetary Health (Formerly MPH 0722)	Nicholas DeFelice, PhD	3	GLOB-H REQ.
MPH 4002 – Environmental & Occupational Epidemiology (Formerly MPH 0419)	Mathilda Chiu, ScD	3	GEN-PH REQ.

MPH 5001 – Introduction to Epidemiology Data Analysis with R and Python (Formerly MPH 0413)	Elza Rechtman, PhD	3	PHDA REQ.
MPH 5002 – Introduction to Geoinformatics in Public Health (Formerly MPH 0601)	Itai Kloog, PhD	3	PHDA REQ.
MPH 6002 – Public Health Surveillance (Formerly MPH 0002)	Hannah Thompson, MD, MPH	3	ELECTIVE
MPH 6006 – Substance Use & Public Health (Formerly MPH 0211)	Elizabeth (Betty) Kolod, MD, MPH	2	ELECTIVE
MPH 6007 – Life Cycle of Violence: Implications for Public Health (Formerly MPH 0212)	Andrea Rothenberg, MS, LCSW	2	ELECTIVE
MPH 6014 – Humanitarian Aid in Complex Emergencies (Formerly MPH 0707)	Annie Sparrow, MD	3	ELECTIVE
MPH 6015 – Global Environmental Change (Formerly MPH 0710)	Cappy Collins, MD, MPH	3	ELECTIVE
MPH 6016 – Medical Law and Ethical Dilemmas in Health Care (Formerly MPH 0713)	Alexander S. Preker, MD, PhD	2	ELECTIVE
MPH 6020 – Nutritional Epidemiology (Formerly MPH 0410)	Xiaotao Zhang, MD PhD & Dania Valvi, MD, PhD, MPH	3	ELECTIVE
MPH 6025 – Mental Health in the Modern Age (Formerly MPH 0417)	Guy Montgomery, PhD	3	ELECTIVE
MPH 6026 – Reproductive & Perinatal Epidemiology (Formerly MPH 0418)	TBD	3	ELECTIVE
MPH 6030 – Statistical Computing with SAS (Formerly MPH 0802)	John Doucette, PhD	2	ELECTIVE
MPH 6031 – Introduction to Qualitative Research Methods (Formerly MPH 0305)	Maya Korin, PhD, MS	3	ELECTIVE
MPH 6034 – Geographic Information Systems in Public Health (Formerly MPH 0005)	TBD	3	ELECTIVE
MPH 6038 – Health Economics (Formerly MPH 0105)	Alexander S. Preker, MD, PhD	3	ELECTIVE
MPH 6040 – Comparative Health Systems (Formerly MPH 0108)	Alexander S. Preker, MD, PhD	3	ELECTIVE
MPH 6041 – Organizational Behavior & Human Resources (Formerly MPH 0111)	Matthew Baney, MS	3	ELECTIVE
MPH 6044 – Seminar in Applied Preventative Medicine (Formerly MPH 0021)	Elizabeth (Betty) Kolod, MD, MPH	1	REQ. FOR PREV MED REISDENTS

MPH 6048 – Independent Study (Formerly MPH 0095)	NA	1-3	ELECTIVE
MPH 6049 – Maintenance of Matriculation (Formerly MPH 8001)	NA	0	MAINTAIN ENROLLMENT
MPH 6050 – Project Continuation (Formerly MPH 0098)	NA	0	CE CONTINUATION
MPH 9000 – Applied Practice Experience (Formerly MPH 0092)	NA	3	MPH APE REQ.
MPH 9001 – Culminating Experience Seminar (Formerly MPH 0023)	NA	1	GEN-PH, GLOB-H, PHDH REQ.
MPH 9002 – Culminating Experience (Formerly MPH 0097)	NA	3	MPH CE REQ.
MPH 9006 – Capstone II for MS Epidemiology Students (Formerly MPH 1098)	Francheska M. Merced-Nieves, Ph.D	1	MS in EPI REQ.

Spring II Term Courses

Course Code & Name	Course Director	Credit	Couse Category
MPH 1000 – Introduction to Policy & Management (Formerly MPH 0100)	Ashley Fox, PhD	3	CORE
MPH 1002 DL – Introduction to Biostatistics (Formerly MPH 0300 DL)	John Doucette, PhD	3	CORE
MPH 1003 – Research Methods (Formerly MPH 0320)	Maya Korin, PhD, MS	1	CORE
MPH 2000 – Epidemiology II (Formerly MPH 0412)	Maayan Yitshak-Sade, PhD	3	EPI & BIO REQ.
MPH 2001 – Epidemiology III (Formerly MPH 0420)	Katharine McCarthy, PhD	3	EPI & BIO REQ.
MPH 2003 – Applied Linear Models II (Formerly MPH 0822)	Elena Colicino, PhD	3	EPI & BIO REQ.
MPH 3002 – Climate Change, Atmospheric Environment and Global Health (Formerly MPH 0721)	Yaguang Wei, PhD	3	GLOB-H REQ.
MPH 3003 – Global Reproductive, Maternal and Child Health (Formerly MPH 0717)	Laura MacIsaac, MD	3	GLOB-H REQ.
MPH 4001 – Health Promotion Strategies (Formerly MPH 0216)	Malika Garg, MD, MS	3	GEN-PH REQ.

MPH 4003 – Implementation Science (Formerly MPH 0020)	Sophia Curdumi Pendley, PhD, MPH & Hannah Thompson, MD, MPH	2	GEN-PH REQ.
MPH 5000 – Introduction to Public Health Data Modeling (Formerly MPH 0602)	Youssef Oulhote, PhD	2	PHDA REQ.
MPH 5003 – Machine Learning in Public Health (Formerly MPH 0603)	Vishal Midya, MStat, PhD	3	PHDA REQ.
MPH 6001 – History of Public Health in America (Formerly MPH 0015)	Paul Theerman, PhD	3	ELECTIVE
MPH 6005 – LGB/TGD/Q+ Health: Research, Policies and Best Practices (Formerly MPH 0016)	Barbara Warren, PsyD	3	ELECTIVE
MPH 6010 – Health & Literacy: Improving Health Communication Efforts (Formerly MPH 0210)	Maya Korin, PhD, MS	3	ELECTIVE
MPH 6011 – Introduction to Medical Anthropology (Formerly MPH 0203)	Victor M. Torres-Vélez, PhD	3	ELECTIVE
MPH 6012 – Racism and Public Health (Formerly MPH 0705)	Malika Garg, MD, MS	3	ELECTIVE
MPH 6018 – Toxicology (Formerly MPH 0515)	Corina Lesseur, PhS	3	ELECTIVE
MPH 6019 – Communitology (Formerly MPH 0525)	Cappy Collins, MD, MPH & Angela Donadelle	3	ELECTIVE
MPH 6021 – Zoonoses: An Emerging Public Health Issue (Formerly MPH 0010)	Stephanie Factor, MD, MPH	3	ELECTIVE
MPH 6022 – Epidemiology of Infectious Diseases (Formerly MPH 0410)	TBD	3	ELECTIVE
MPH 6027 – Big Data Epidemiology: Intro to OMICS Research (Formerly MPH 0422)	Dania Valvi, MD, PhD, MPH, Megan Niedzwiecki, PhD, & Vishal Midya, MStat, PhD	3	ELECTIVE
MPH 6035 – Digital Transformation in Healthcare and Medical Research with Integrity (Formerly MPH 0017)	TBD	3	ELECTIVE
MPH 6036 – Strategic & Program Management (Formerly MPH 0103)	TBD	3	ELECTIVE
MPH 6037 – Healthcare in Communities & Public Sector (Formerly MPH 0104)	Richard Roberts, JD	3	ELECTIVE
MPH 6039 – Accounting & Budgeting for Public Health Administration (Formerly MPH 0107)	Frank Cino, MPH, CPA	3	ELECTIVE
MPH 6045 – Public Health Conference (Formerly MPH 0795)	TBD	1	ELECTIVE

MPH 6044 – Seminar in Applied Preventative Medicine (Formerly MPH 0021)	Elizabeth (Betty) Kolod, MD, MPH	1	REQ. FOR PREV MED REISDENTS
MPH 6048 – Independent Study (Formerly MPH 0095)	NA	1-3	ELECTIVE
MPH 6049 – Maintenance of Matriculation (Formerly MPH 8001)	NA	0	MAINTAIN ENROLLMENT
MPH 6050 – Project Continuation (Formerly MPH 0098)	NA	0	CE CONTINUATION
MPH 9000 – Applied Practice Experience (Formerly MPH 0092)	NA	3	MPH APE REQ.
MPH 9001 – Culminating Experience Seminar (Formerly MPH 0023)	NA	1	GEN-PH, GLOB-H, PHDH REQ.
MPH 9002 – Culminating Experience (Formerly MPH 0097)	NA	3	MPH CE REQ.
MPH 9003 – Research Seminar in Epidemiology for MS in Epi Students (Formerly MPH 0421)	Francheska M. Merced-Nieves, Ph.D	2	MS in EPI REQ.
MPH 9007 – Capstone III for MS Epidemiology Students (Formerly MPH 1099)	Francheska M. Merced-Nieves, Ph.D	1	MS in EPI REQ.

Summer Term Courses

Course Code & Name	Course Director	Credit	Couse Category
MPH 6009 – Health Equity, Literacy, and Communications (Formerly MPH 0217)	Maya Korin, PhD, MS, Elizabeth (Betty) Kolod, MD, MPH & Alyssa Gale, MPH	1	ELECTIVE
MPH 6017 – Clinical, Occupational & Environmental Medicine (Formerly MPH 0522)	John Meyer, MD, MPH & Rabeea Khan, MD, MPH	3	CORE - substituted for MPH 1005 (formerly MPH 0500)