

July 2008



MOUNT SINAI  
SCHOOL OF  
MEDICINE  
NEW YORK

## **MASTER OF PUBLIC HEALTH PROGRAM**



**CURRICULUM GUIDE**

**ACADEMIC YEAR 2008-2009**

# GENERAL PUBLIC HEALTH

## **MPH001 INTRODUCTION TO PUBLIC HEALTH**

Course Directors: Philip Landrigan, MD, MSc and Leo Trasande, MD, MPP

Autumn Term

Tuesdays

Years Taught 3

2 credits

This introductory course will provide a broad overview of public health – its history, triumphs and challenges, as well as its prospects for the future. The course will provide a strong foundation for students entering the Master of Public Health Program. A principal goal of the course is to give students an understanding of the structure and function of the public health system in the United States and internationally. Some of the leading figures in public health in this country and abroad will be invited to present lectures, and they will 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 ever changing field.

## **MPH002 DISEASE PREVENTION & HEALTH PROMOTION FOR NON-HEALTH PROFESSIONALS**

Course Directors: Richard Bordowitz, MD and Emily Senay, MD, MPh

Autumn Term

Tuesdays

Years Taught 2

2 credits

Preventive Medicine is the branch and practice of medicine focused on promoting health thereby preventing disease from both an individual and population perspective. Preventive Medicine specialists study the health of populations, develop screening guidelines in asymptomatic people, determine factors for disease and propose evidence-based treatment algorithms and health promotion strategies and evaluation of those strategies. Preventive Medicine and public health are strongly linked through a shared focus on health surveillance of health indicators to better understand the health of the public.

Designed for the non-healthcare professional, this course introduces students to the field and the varied professionals who work within it. The course focuses on the top causes of morbidity and mortality in the United States, the surveillance methods used in detection, and current goals and guidelines for screening and prevention on a local and national level. Specific topics will include the latest methods to detect and prevent cardiovascular diseases, cancers, infectious diseases, depression, substance abuse, suicide, unintentional injuries, violence, and environmental health threats. The final lectures will show how prevention is currently put into practice and discuss future challenges and global threats to public health.

### **MPH003 CURRENT TOPICS IN CLINICAL PREVENTIVE MEDICINE**

Course Directors: Richard Bordowitz, MD; Elizabeth Garland, MD and Emily Senay, MD  
Spring Term—Every other year—Next Offered 2009

Tuesdays

Years Taught 7

3 credits

This course builds on the fundamental aspects of clinical prevention and the United States Preventive Services Task Force Guidelines. Designed for the healthcare professional, the course will include discussions about new evidence-based approaches that guide clinicians regarding the appropriateness and utility of new preventive services, screening tests, guidance for counseling patients, and an examination of current interventions at the community level, in addition to current controversies and research in the prevention field.

This course is limited to licensed medical professionals with the exception of those who receive permission from the course director.

### **MPH005 GLOBAL INFORMATION SYSTEMS (GIS) FOR PUBLIC HEALTH**

Course Director: Susan Resnick, MA

Spring Term

Seminar – Intensive Dates TBD

1 credit

Years Taught 1

Geographic Information Systems (GIS) are computerized systems designed for the storage, retrieval and analysis of spatially referenced data. This course is a hands on introductory computer workshop designed to teach students the fundamentals of how to use GIS. Each lesson is based on a project which involves visualizing and analyzing health-related data. Topics covered include how to find and prepare demographic and health data for mapping, basic cartographic principles, thematic mapping, geocoding, mapping multiple variables and simple geoprocessing tools.

### **MPH008 INTRODUCTION TO PUBLIC HEALTH NUTRITION**

Course Director: Jenny Walker, MD

Spring Term

Mondays

Years Taught 2

2 credits

This course is designed to provide an introductory overview of Public Health Nutrition concepts and issues. It will deliver a broad but balanced approach to the factors that comprise Public Health Nutrition, including social sciences, epidemiology and nutritional sciences. The course is divided into three complementary components: Individual Nutrition, Food Supply, and Food Safety.

### **MPH010 ZOONOSES: AN EMERGING PUBLIC HEALTH ISSUE**

Course Director: Stephanie Factor, MD, MPH

Spring Term

Thursdays

Years Taught 1

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.

### **MPH012 FLOOD, PESTILENCE & PLAGUE: COMMUNICATING COMPLEX EMERGENCIES**

Course Director: Christina Zarcadoolas, PhD

Autumn Term—Every other year—Next Offered 2009

Thursdays

Years Taught 2

3 credits

The terrorist attacks of September 11, 2001, Hurricane Katrina and the ongoing concern about a possible avian flu pandemic can be used to demonstrate both weaknesses and strengths in the public health system in the United States. Much criticism points beyond infrastructure problems and toward communications problems – e.g. federal, state and local officials’ inadequacies in communicating with each other and the general public. Many have become more convinced that surviving a serious, complex emergency involves pre-planning, and effective situational response. Both demand clear communication with the public. Aside from sporadic directions to the public concerning a wide range of potential hazards, there has been no focused effort to advance the general public’s abilities to attend to, understand and act on risk communication, disaster preparedness information and emergency decision-making. Internationally, where man-made and natural disasters coupled with political and social strife have been more ubiquitous, “complex emergencies” demand responses mindful of a broad range of socio-political-economic factors. This course will use a case study approach to investigate the strengths and weaknesses of current emergency and disaster preparedness approaches in the United States.

### **MPH021 SEMINAR IN APPLIED PREVENTIVE MEDICINE**

Course Directors: Elizabeth Garland, MD, MS

Full Year Course

Tuesdays Mornings

Years Taught 11

2 credits

This weekly seminar focuses on current local, national, and international issues in public health and preventive medicine. Discussions center on critical review of the published literature in public health and include topics related to health policy and management,

economic and legal issues, and the impact of these issues on the health of populations. On a rotating basis, each student is responsible for setting the agenda and chairing seminar discussions.

Pre-requisites: Introduction to Epidemiology  
Introduction to Biostatistics

Students who are not Residents in the Department of Community & Preventive Medicine must receive permission from Course Director prior to enrolling in this course.

# HEALTH POLICY, MANAGEMENT & ECONOMICS

## **MPH103 STRATEGIC & PROGRAM MANAGEMENT**

Course Director: Gary Rosenberg, PhD

Winter Term

Mondays

Years Taught 5

3 credits

This course is an introduction to understanding public health management, program planning, implementation and evaluation. Through readings, class discussion and case analysis, students will have the opportunity to explore and identify key issues impacting the management of public health programs; formulate and evaluate alternative solutions to problems; learn verbally and in writing to present analysis of managerial problems and plans. They will learn to apply strategic thinking to managing public health programs and critically analyze management strategies and organizational design which lead to successful or failed outcomes in public health programs.

## **MPH104 HEALTHCARE IN COMMUNITIES & THE PUBLIC SECTOR**

Course Director: Gary Rosenberg, PhD

Spring Term

Wednesdays

Years Taught 3

3 credits

Health care leaders and policy makers seek to maximize the promise and minimize the problems associated with providing health services to all Americans. In order to achieve this goal, it is necessary to become familiar with the health care industry, the social, political and economic forces that shape current policy and organizational practices. This course is designed to meet that end.

We do this by examining how the crisis of health care costs have shaped the response to those who finance the delivery of care, those who provide the services, and those who seek care. A major focus of the class is on understanding the public health system, community-based care, community assessment and the development of market-based managed care as an alternative to government-sponsored health care reform. These responses will be judged against the competing and sometimes conflicting goals of access, quality and efficiency of care.

You should come away from this class with a broad-based understanding of how and why the health care system operates in the way that it does and where you will be positioned as future leaders and policy makers of this system.

### **MPH105 HEALTH POLICY & ECONOMICS**

Course Director: Leo Trasande, MD, MPP

Winter Term

Thursdays

Years Taught 1

3 credits

Economics provides the tools to illustrate and analyze the costs of making alternate choices, offering an opportunity to more fully understand the decision-making process. Using an established set of criteria to evaluate the use of scarce resources, economists attempt to explain and predict outcomes. The study of economics as it relates to the healthcare industry is different from basic economics because individuals do not have complete knowledge of their healthcare needs and treatment options. As patients, consumers must rely upon healthcare professionals, who, in turn, are confronted with a myriad of challenges as the management and treatment of disease is not without its uncertainties. This course will discuss the role and importance of economics in the micro- and macro- context faced by healthcare professionals and the industry-at-large.

### **MPH110 PHARMACOECONOMICS**

Course Director: Renee Arnold, PharmD

Winter Term

Thursdays

Years Taught 2

3 credits

This course provides an introduction to the major concepts and principles of pharmacoeconomics, with particular emphasis on modeling, methodologies and data sources. Students will learn about the international use of pharmacoeconomics in drug approval, regulation and pricing. Examples of pharmacoeconomic models used by the pharmaceutical industry and in government will illustrate the theoretical lessons.

Pre-requisites: Introduction to Public Health  
Health Policy & Economics

### **<sup>NEW</sup> MPH111 PATIENT SAFETY & PROCESS IMPROVEMENT**

Course Director: Navneet Kathuria, MD

Winter Term

Thursdays

Years Taught 1

3 credits

The triad of access, quality, and cost of care provide a useful framework for the discussion of patient safety and process improvement initiatives. This course explores issues and concerns surrounding perceptions of quality, access and cost of care. Further, it differentiates among the various definitions (process vs. outcome) and perspectives (person vs. system) of quality in the healthcare sector. Finally, the course provides an historical perspective of seminal quality initiatives and reviews the ways that social, political, technological, economic, and cultural forces have shaped them.

## **MPH120 COMPLEX HEALTHCARE PROBLEMS & EVIDENCED BASED SOLUTIONS**

Course Director: Jonathan Metsch, Dr.PH

Winter Term

Mondays

Years Taught 1

3 credits

Health care administration, planning and program development, in various clinical settings (e.g., hospital, health department, home care agency, community health center, long term care facility) is complicated: the process is disorderly, never sequential; it typically involves multiple disciplines trained in different problem solving strategies; is colored by political considerations which are usually not clearly articulated; frequently moves very quickly. Therefore, the Management Leadership Team is constantly facing Complex Problems.

Complex Problems are predicaments where the decision-maker(s) must integrate or reconcile at least two competing priorities that may not be complementary. Complex problems fall into several categories including having to reach agreement on goals while simultaneously evaluating options; where goals are clear but political support is not; where the definition of the problem keeps changing and consensus has to constantly be reestablished; and where there are so many variables it is difficult to determine actual possible outcomes.

Case material used to explore Complex Problems is based on actual situations faced by Dr. Metsch as a hospital system CEO for seventeen years. Cases focus on , e.g., integrated healthcare delivery systems; clinical program development; regionalization of health care services; the collapse of Medicaid and the implosion of safety-net providers; the mythology of quality assurance and evidence-based medicine; how health care policy is really made "Under-the-Radar; getting a "Seat at the (Public Policy) Table," and strategic planning for small non-for-profit health agencies.

Building on the powerful concept of Evidenced Based Medicine, case solutions are developed using a robust, multi-disciplinary, integrative notion of Evidenced Based management decision-making.

## **SOCIO-BEHAVIORAL HEALTH**

### **NEW MPH201 INTRODUCTION TO SOCIO-BEHAVIORAL MEDICINE**

Course Directors: Mary Foley, MS, EdD and Michael Diefenbach, MD

Winter Term

Tuesdays

Years Taught

3 credits

This core course provides an overview of the social and behavioral sciences and their importance in the interdisciplinary field of public health. A primary emphasis is on the social ecological model, its application to public health issues, and its use in the development of policies, strategies, interventions and programs. The course content will introduce students to several relevant social and behavioral theories as well as a range of community health assessment and planning models used by public health professionals in both domestic and international venues. In addition, some lectures will focus on specific diseases that have a detrimental effect on public health and finally, a few lectures are reserved to provide students with insight into public health organizations. 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.

### **MPH203 INTRODUCTION TO MEDICAL ANTHROPOLOGY**

Course Director: G. Derrick Hodge, PhD

Spring Term

Mondays

Years Taught 1

3 credits

This course begins by studying the social construction of bodies, including the construction of normality. This will lead us to consider the ways in which health and illness are understood differently in non-western cultural contexts, and how this might challenge our own interpretations. This will include a look at the implications of the personal versus the interpersonal theories of disease, that is, the text to which disease is caused by biomedical processes versus the text to which they are a product of social relationships and social structures. We then turn to commodification: the dissection of the body, sale of its organs, and the participation of medical professionals in the harvesting and distribution tissue commodities.

The second half of the course will be devoted to “critical medical anthropology”, a larger structural critique of the ways in which health and illness are not only reflective of, but also instruments in, political economy and the distribution of power. Thus, for instance, critical medical anthropology examines the creation of illnesses to create profit for pharmaceutical corporations, the use of (licit and illicit) drugs to create a quiescent work force, the ways that the current world political system produces illness, and the ways that health and illness both reflect and reproduce social inequalities. We conclude with a study of a health care delivery system based on a radically different political economy than that of the United States. Studying the Cuban health care system will integrate what we have learned about differential understandings of health and illness, the social

definitions of medical normalcy, the relationships between political economy and medical care delivery, and the interactions between domestic and global health.

**MSCR207 CULTURE, ILLNESS & COMMUNITY HEALTH**

Course Directors: Gary Butts, MD; Mary Foley, MS, EdD and Edward Poliandro, PhD

Spring Term

Wednesdays

Years Taught 6

3 credits

Culture is defined as the integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values and institutions of a racial, ethnic, religious or social group. Using various methods such as case presentations, small group discussions, and collaborative, introspective and self-directed learning experiences, participants will enhance their appreciation of culture as a predominant force in shaping behavior, values and systems that effect health. Through this course, participants will also enhance their competencies necessary to provide effective health care and to conduct research with diverse patients and communities.

**MPH210 HEALTH LITERACY: CAN THE PUBLIC BE HEALTHY WITHOUT IT?**

Course Director: Christina Zarcadoolas, PhD

Spring Term

Mondays

Years Taught 3

3 credits

The U.S. population faces well-recognized health risks including chronic diseases, environmental degradation, and natural and man-made disasters. But there is a silent killer, less diagnosed and essentially untreated, maneuvering just below the surface that poses a great threat to public health in the 21st century. This silent killer is low health literacy – the reality that almost half of adults in the U.S., over 90 million people, struggle to find, understand, and correctly use basic health information. The consequences of low health literacy include inadequate skills to understand health and environmental health risks, to take actions to mitigate these risks, to access and use the health systems, lack of social empowerment and self-efficacy, poor health outcomes, diminished quality of life, and increased financial costs to society. In this course we will discuss an elaborated model for understanding health literacy. The new model delineates the role of four core domains: fundamental literacy, scientific literacy, civic literacy and cultural literacy. Students will learn principles of health literacy in the areas of science, civic and cultural literacy that they can apply to improve their daily performance as health professionals. Students will also learn to recognize some health literacy demands their health specialty or health focus places on the average layperson and low health literate patients/consumers.

### **MPH211 ADDICTION MEDICINE**

Course Directors: Mary Foley, MS, EdD and Elizabeth Garland, MD, MS

Autumn Term – Every other year – Next offered 2009

Thursdays

Years Taught 2

2 credits

This course covers issues in prevention, recognition, treatment, policy, and research in addictions and dependencies. The overall course goals are to provide knowledge in the field of addictions and dependencies, inculcate or reinforce positive attitudes, and identify areas of needed clinical and translational research. Taught by knowledgeable citywide experts in the addiction specialty, the course consists of 12 distinct but interrelated sessions. Topics for the sessions include pharmacologic and behavioral therapies for drug, alcohol, licit and illicit substances, and tobacco addictions, harm reduction, managed care, and addictions in special populations, and public health policy, among others. Students will be required to attend at least one AA or NA meeting. Classes are conducted in seminar format. Specific clinical or field experiences for students enrolled in the course can be arranged upon request.

### **MPH212 LIFE CYCLE OF VIOLENCE: IMPLICATIONS FOR PUBLIC HEALTH**

Course Director: Andrea Rothenberg, MS, LCSW

Winter Term

Thursdays

Years Taught 3

2 credits

From infanticide to abuse of the elderly, multiple forms of violence remain a concern for individuals, families, communities, and the world at large. Once thought of solely as a criminal justice issue, violence prevention and intervention have been embraced as a major public health issue. This course will examine vulnerable populations, phases of life, and world conditions in which violence are most prevalent. Emphasis will be on identifying the needs of populations at risk; creating partnerships with other organizations, implementing evidence based interventions, and measuring success.

### **MPH213 HEALTH AND HUMAN RIGHTS: HUMAN RIGHTS ABUSES, TORTURE & ITS CONSEQUENCES**

Course Director: Ramin Asgary, MD, MPH, MSc

Autumn Term

Wednesdays

Years Taught 2

2 credits

More than 500,000 torture survivors are currently living in the United States. Asylum seekers and torture survivors face multiple health consequences from an individual perspective in addition to multi-faceted challenges in a socio-cultural and economic context. The impact on health includes both the physical and psychological impact of torture over and above issues related to the person's relocation and displacement challenges.

Public health and healthcare professionals are often unaware of the prevalence of torture in the communities they serve. The United Nations Convention Against Torture has

identified this unmet need and has called for all healthcare professionals to be able to identify and provide services to survivors of torture.

This course is developed to raise students' awareness of human rights abuses, specifically torture, provide education in the epidemiology of torture and the demographics of survivors, as well as understanding the health consequences of human rights abuses. At the end of the course, students will be able to discuss policy and advocacy options. The course explores the multidimensional health challenges faced by survivors and their caregivers. It introduces students to the management of the survivors' health complaints and strategies for accessing available medical and social services. The course prepares students to evaluate and care for torture survivors how to document the physical and psychological needs in affidavits necessary for those seeking asylum. Students will be prepared to engage in improving the health of a frequently ignored population in the policy and medico-legal arenas.

**MPH215 WHAT'S SEX GOT TO DO WITH IT? TEEN PREGNANCY PREVENTION & INTERVENTION**

Course Director: Andrea Rothenberg, MS, LCSW

Autumn Term

Thursdays

Years Taught 3

2 credits

Pregnancy during the second decade of life is a complex issue requiring multifaceted interventions on a primary, secondary, and tertiary level. A broad range of sociological, cultural and behavioral issues affecting adolescent pregnancy will be explored. Topics will include: predisposing and contributing factors to early pregnancy, protective factors and assets building during development, the strengths perspective, access to reproductive healthcare for women and men, options counseling, and evidenced based pregnancy prevention and intervention programs.

Teen mothers, young fathers, and the parents and children of teen parents as well as teens who have chosen not to have a baby will be guest speakers. Emphasis will be on assisting healthcare providers explore the latest trends in this area as well as their individual attitudes and beliefs about early pregnancy and parenting in order to enhance their ability to work effectively with young women and their families.

# QUANTITATIVE & QUALITATIVE RESEARCH METHODS

## **MPH300 INTRODUCTION TO BIOSTATISTICS**

Course Director: Jim Godbold, PhD

Autumn Term

Monday and Wednesday

Years Taught 21

3 credits

Students will learn how to conduct descriptive and univariate analyses of data from a well-designed public health or medical study and how to interpret the results of the analyses. Students will learn how to present numerical summary measures derived from large data sets as well as appropriate use of graphical displays. Basic concepts of probability theory will be covered, along with notions of conditional probability, illustrated with measures for assessing efficacy of diagnostic and screening tests. Important probability distributions, such as the Normal and binomial, will be discussed, and students will be able to solve problems involving probabilities calculated from these distributions.

Students will learn how to perform the three basic types of statistical inference: point estimation, hypothesis testing, and confidence intervals. In particular, students will learn how to apply the t-test to compare two means, and how to apply the analysis of variance (ANOVA) to compare three or more means. Non-parametric tests will be illustrated as alternatives to t-tests or ANOVA when the assumption of Normality is in doubt. Students will learn how to use chi square methods to analyze categorical data. Students will also learn how to recognize censored data arising from historical or concurrent prospective studies, how to apply techniques of survival analysis to generate Kaplan-Meier curves, and how to use the log-rank test to test for differences between curves. Simple linear regression and correlation will be discussed as methods for examining the relationship between two continuous variables, along with ways to evaluate the appropriateness of the regression model that has been fit to the data.

## **MPH305 INTRODUCTION TO QUALITATIVE RESEARCH METHODS**

Course Director: Christina Zarcadoolas, PhD

Autumn Term

Thursday

Years Taught 3

3 credits

Heart disease, toxicants in food and water, HIV/AIDS, bio-terrorism and avian flu – we live in an ever-changing landscape of risks where information alone does not necessarily lead us to practice good health behaviors. How people perceive, comprehend and prioritize the health information around them powerfully effects what they act on.

This course provides the student with an understanding of how attitudes and perceptions of an individual or group can impact their priorities and actions. Qualitative methodologies bring an enhanced understanding to quantitative research. The qualitative research methods we will cover in this course include: ethnographic/participant observation, in-depth interviews, focus groups, panels and small-scale surveying. Students will be required to design and conduct small field research activities throughout the semester. Methods and findings will be critiqued and refined with class input and participation.

Pre-requisites: Introduction to Public Health  
Introduction to Biostatistics

### **MPH311 MULTIVARIABLE METHODS**

Course Director: John Doucette, PhD

Winter Term

Thursdays

Years Taught 11

3 credits

This intermediate-level biostatistics course involves in-depth study of statistical methods that examine the relationship among multiple (i.e., more than 2) variables at the same time. The methods covered include linear regression, logistic regression and Cox proportional hazards models. Students will also learn about tests of model fit, regression diagnostics, representation of categorical independent variables and transformations of dependent variables. Students are shown how to apply these methods using statistical software (SPSS<sup>®</sup>) and how to interpret the resulting computer output.

Pre-requisites: Introduction to Biostatistics  
Introduction to Epidemiology (May be taken concurrently.)

### **MSCR312 RESEARCH ETHICS**

Course Director: Rosamond Rhodes, PhD

Autumn Term

Mondays

Years Taught 6

3 credits

This seminar will explore the complex issues raised by human subject research. The seminar will begin with a review of some of the landmark cases of unethical use of human subjects in research, the policies that shape our current understanding of the ethical conduct of research, and the mechanisms for research oversight that have been instituted. Then, through reading a broad selection of seminal articles and papers from the recent literature, seminar presentations, and discussion, we shall engage in a conceptual analysis of a number of controversial and pressing issues.

We shall be discussing the moral and public policy aspects of topics such as research design, risk-benefit assessment, informed consent, the use of “vulnerable” subjects, research without consent, confidentiality, inducements, conflicts of interests, disclosure

of research findings, tissue use, vaccine development, international research. In addition to exploring the moral landscape of this rich and provocative domain, the seminar should clarify and inform participants' understanding of basic moral concepts such as autonomy and justice. It should also serve as a model for approaching other issues in applied ethics.

### **MPH320 RESEARCH METHODS**

Course Director: TBD

Winter Term

Mondays

Years Taught

1 credit

Research Methods encompasses a set of fundamental skills and tools necessary for approaching the process of developing and answering a research question or being an informed consumer of information in the marketplace. This course provides a solid and practical framework enabling students to successfully embark upon their Master's Theses. The course is an essential component to understanding how to organize research: helping students to conceptualize, develop, propose, design, and write research papers, in general, and the Thesis, in particular.

Students are required to take this course in their second term in the Master of Public Health Program. The course is only open to matriculating students in the Master of Public Health Program.

This 1 credit course will be graded on a Pass/Fail basis.

Pre-requisites: Introduction to Epidemiology (May be taken concurrently.)  
Introduction to Biostatistics

### **MSCR323 DESIGNING CLINICAL & PUBLIC HEALTH RESEARCH**

Course Directors: Henry Sacks, MD, PhD and Albert Siu, MD, MSPH

Autumn Term

This course meets once a week:

Years Taught 10

3 credits

At the end of the course the student will be able to:

- Identify the strengths and weaknesses of various study designs.
- Contrast and compare research methodologies relevant to various clinical research questions.
- Select and employ appropriate research study methods for clinical research: prospective and retrospective study designs, including cohort, case-control, clinical trials, studies of diagnostic tests, secondary data analysis, decision analysis, cost-effectiveness analysis, and meta-analysis.
- Design a clinical research protocol for an identified clinical question: develop a research question; select study subjects and variables; develop hypotheses; determine sample size; demonstrate familiarity with essentials of grant writing; and, identify methods to obtain funding.

## **EPIDEMIOLOGY**

### **MPH400 INTRODUCTION TO EPIDEMIOLOGY**

Course Director: Stephanie Factor, MD, MPH

Winter Term

Mondays and Wednesdays

Years Taught 2

3 credits

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 401 INTRODUCTORY JOURNAL CLUB**

Course Director: Yvette Sealy, PhD, MPH

Full Year Course

Once per month

Years Taught 1

1 credit

The Journal Club provides students with a functional opportunity to learn to read, analyze, and critique the professional literature under the guidance of a variety of faculty members from the Mount Sinai Medical Center. At least one week before each scheduled Club meeting, the invited faculty member selects a current article from the public health literature. The faculty member serves as discussion moderator and students attend class prepared to discuss the assigned reading. In the Winter and Spring Terms, students will have a role in selecting the topics to be discussed.

The Club meets once each month from September to June (students enroll for this year-long course in the Autumn Term). This course is graded on a Pass/Fail basis.

### **MPH410 EPIDEMIOLOGY OF INFECTIOUS DISEASES**

Course Directors: Melissa Marx, PhD, MPH and Preeti Pathela, MPH, Dr.Ph

Spring Term

Wednesdays

Years Taught 4

3 credits

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.

Through varied lectures, 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 also participate in various classroom exercises, during which they will investigate outbreaks, create surveillance plans, present evidence of a disease threat, and recommend prevention and control measures.

Pre-requisites: Introduction to Epidemiology  
Introduction to Biostatistics

### **MPH411 JOURNAL CLUB FOR HEALTH PROFESSIONALS**

Course Director: Richard Bordowitz, MD

Full Year Course

Every other Tuesday 9:00am-10:00am

Years Taught 3

1 credit

This intermediate level Journal Club builds upon the Introductory Journal Club, training students in the presentation of articles relevant to the public health specialties of environmental, occupational and preventive medicine. Each student 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: Introduction to Epidemiology  
Introduction to Biostatistics

Students must be currently licensed health professionals, however if they are not currently licensed they must obtain the approval of the Course Director to enroll.

The Club meets twice a month for the academic year. This course is graded on a Pass/Fail basis.

### **MPH415 CASE STUDIES IN EPIDEMIOLOGY: ENVIRONMENTAL & OCCUPATIONAL HEALTH**

Course Director: Anne Golden, PhD

Spring Term—Every Other Year—Next Offered 2010

Wednesdays

Years Taught 6

3 credits

This course teaches students the practical steps involved in conducting an epidemiological investigation of a disease occurring in the workplace or due to a wider environmental exposure. Class discussions involve problem-based analysis of published

case studies led by faculty with particular expertise in the relevant area of environmental or occupational epidemiology.

Pre-requisites:           Introduction to Epidemiology  
                                  Introduction to Biostatistics  
                                  Basics of Clinical Environmental & Occupational Medicine or  
                                  Introduction to Environmental & Occupational Health

Students who are not physicians or post-doctoral must obtain the approval of the Course Director to enroll.

# ENVIRONMENTAL & OCCUPATIONAL HEALTH

## **MPH500 INTRODUCTION TO ENVIRONMENTAL & OCCUPATIONAL HEALTH**

Course Director: Jacqueline Moline, MD, MSc

Winter Term—Every Other Year—Next Offered 2009

Tuesdays

Years Taught 5

3 credits

The purpose of this course is to provide an overview of environmental and occupational medicine. Topics covered include basic principles of exposure assessment; adult and pediatric environmental and occupational history taking essentials; heavy metal exposures in adults and children; environmental and occupational aspects of lung disease in adults and children; the effects of environmental exposures on the kidney; investigations of environmental disease clusters; and occupational screening programs.

The course format consists of participatory lectures using clinical cases as much as possible. Readings will be distributed in class at least one week before the lecture.

## **MPH506 TOPICS ON SAFETY AND ERGONOMICS**

Course Directors: Alice Freund, MSPH and Jonathan Dropkin, MS

Winter Term – Every Other Year – Next Offered 2009

Mondays

Years Taught 4

1 credit

This course consists of ten evening sessions held approximately every week on a variety of topics on safety and ergonomic program management. The purpose of the class is to give public health students insight into the everyday workings of on-the-job safety programs. It is designed for doctors, health administrators, and other health and safety professionals who will have a role in implementing safety and ergonomic programs in industry, business or union settings. There will be weekly reading assignments and two field visits to observe elements of safety and ergonomic programs.

The topics covered will include: Safety History and Scope of Current Injuries and Fatalities; Hazard Identification and Interpreting Injury and Illness Data; Incident/Accident Investigations and Root Cause Analysis; Elements of an Ergonomics Program, including hazard identification and control of occupational biomechanical and psycho-social exposures, and medical surveillance; Role of Labor and Management in Safety Programs; Making a Case for Safety; cost analysis and legal responsibilities; Examples of Safety Programs in certain trades. The class format will be informal and participatory, relying heavily on class discussion of the readings.

**MPH515 TOXICOLOGY**

Course Director: Arlene Weiss, MS, DABT

Spring Term

Tuesdays

Years Taught 2

3 credits

This course provides an introduction to the major concepts in toxicology with particular emphasis on specific chemical agents and classes of agents including pesticides, metals, solvents and vapors. The difference between a toxin and toxicant is discussed. Students will learn about the history of toxicology and the mechanisms of action of certain classes of compounds. Specific target organ toxicities are covered including, hepatic, renal, dermal, cardiovascular, pulmonary, neuronal, developmental, reproductive, and endocrine systems. In addition, case vignettes consisting of specific toxicological agents and their effects in the form of real-life case studies with physical findings, lab data and the actual diagnoses with a relevant discussion of the agent and the management of toxic effect. The text used for the class is Casarett & Doull's Essentials of Toxicology (Klaassen and Watkins) and Toxicology Pearls (Osterhoudt et al.).

**MPH522 BASICS OF CLINICAL ENVIRONMENTAL & OCCUPATIONAL MEDICINE**

Course Directors: Jacqueline Moline, MD, MSc

Summer Intensive One-Week Course

Years Taught 6

3 credits

Environmental and occupational exposures known to cause human disease are examined from the perspectives of clinical diagnosis, toxicology, and treatment. Regulatory and other approaches to reduce exposure will be deliberated. Important public health and policy implications will be discussed.

The course is limited to licensed physicians except with the permission of the Course Director and Specialty Track Advisor of the Environment & Occupational Health specialty track.

**MPH523 ADVANCED OCCUPATIONAL & ENVIRONMENTAL PULMONARY DISEASE**

Course Director: Jaime Szeinuk, MD

Autumn Term - Every Other Year - Next Offered 2008

Tuesdays

Years Taught 1

2 credits

Pulmonary disease due to occupational and environmental exposures has historically been at the center of the practice and science of occupational medicine. In industrialized countries, occupational asthma is currently the number one occupational lung disease. This course will review pulmonary diseases caused by occupational and environmental exposures from the perspectives of clinical diagnosis, toxicology, and treatment. Regulatory and other approaches to reduce exposure will be discussed. Public health and policy implications will be considered as well.

Pre-requisite: This course is limited to currently licensed healthcare professionals.

**MPH525 PEDIATRIC ENVIRONMENTAL HEALTH**

Course Director: Joel Forman, MD

Spring Term

Wednesdays

Years Taught 3

3 credits

This course introduces the learner to the potential health effects in children from exposures to chemical and physical agents from indoor and outdoor environments, such as lead and mercury, a wide variety of organic chemicals such as solvents, pesticides and air pollutants, and molds. It covers the 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 journal article critiques and reviews, lectures and clinical case scenarios.

**MPH526 A SITE TOUR: HISTORICAL PERSPECTIVES OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY: NY/NJ ERC WASTE SITE TOUR†**

Course Director: Aboaba Afilaka, MBBS

Summer Intensive (5-day overnight)

Contacts: Jack Caravanos and Mitchell Rosen

Number of Students is Limited

3 credits

This course takes students on a bus tour of some of the most notorious environmental disasters in Northeast America and Canada and examines attempts to remediate these sites examining how these efforts have succeeded or failed. This 5-day intensive course tours sites includes sites such as the Love Canal, Thetford Mines (the largest Canadian Asbestos Mine), and the Textile Museum in Lowell, Massachusetts among others.

†This course is limited to Occupational Medicine Residents or those who have received express permission of the Course Director and the MPH Program Director.

**MPH527 INTERDISCIPLINARY SEMINAR ON OCCUPATIONAL SAFETY AND HEALTH (EOHS 728, HUNTER) †**

Course Director: Kim Morland, PhD

Autumn Term

Seminar Course

1 credit

The NY/NJ Education and Research Center (ERC) with support from the National Institute for Occupational Safety and Health (NIOSH) offers this course on case studies in occupational safety and health. Emphasis is on safety problem solving as members of interdisciplinary teams if industrial hygienists, occupational physicians, ergonomists and occupational safety engineering specialists. Students from five schools including Mount Sinai School of Medicine, Hunter College/CUNY, the University of Medicine and Dentistry of New Jersey/Robert Wood Johnson Medicinal School, New Jersey Institute of Technology and the NYU Program in Occupational Ergonomics and Biomechanics participate in this seminar.

†This course is restricted to Occupational Medicine Residents in the Department of Community and Preventive Medicine.

**MPH528 INDUSTRIAL PROCESSES AND PLANT VISITS (EOHS 759, HUNTER) †**

Course Directors: Drs. Michael Gochfeld, David Kotelchuck and Franklin Mirer

Winter Term and Spring Term

Seminar

Years Taught

2 credits

The NY/NJ Education and Research Center (ERC) with support from the National Institute for Occupational Safety and Health (NIOSH) takes students on industrial site visits of some of the largest employers in the New York/New Jersey area including Power Battery Company, Pfizer, UMDMJ University Hospital, New York Times Printing plant, and the Keyspan Ravenswood Power Plant. Students are expected to write site visit reports on identification of hazards and potential controls; appropriateness of health & safety recommendations; and accuracy of the overall health & safety program.

†This course is restricted to Occupational Medicine Residents in the Department of Community & Preventive Medicine.

**MPH529 INDUSTRIAL HYGIENE (EOHS 757, HUNTER) †**

Course Director: Dr. Mark Goldberg

Spring Term

3 credits

This course introduces the student to the basic principles of recognition, evaluation and control of the occupational environment. Following a review of occupational health standards and regulations, the following topics are covered:

- The role of the industrial hygienist and the relationship of IH to other occupational health and safety professions.
- Measurement of chemical substances and biological agents in the work place, including:
  - general principles of monitoring;
  - air sampling instruments and their calibration;
  - monitoring for gases and vapors;
  - properties and behavior of aerosols;
  - principles of aerosol filtration;
  - size selective sampling, inertial and gravitational collectors.
- Monitoring rational and strategies, including:
  - sampling for compliance vs. sampling for epidemiological studies;
  - sampling strategies;
  - statistical considerations.
- Other tools for assessing the workplace environment:
  - walk through surveys.
- Control of chemical substances in the workplace.
- Personal protective equipment, with a focus on respiratory protection.
- Physical hazards in the workplace with a focus on heat stress assessment and control

†This course is restricted to Occupational Medicine Residents in the Department of Community & Preventive Medicine.

## OUTCOMES RESEARCH

### **MSCR620 BASIC SCIENCE FOR THE CLINICAL INVESTIGATOR**

Course Director: George Diaz, MD

Spring Term

Tuesdays

3 credits

The goals of the course are to refresh students on basic scientific principles in disciplines relevant for understanding advances in medical research and to provide examples of translation of basic research to clinical practice. Areas to be covered include molecular genetics, ramifications of the Human Genome Project, pharmacogenomics, cellular signaling, inflammation and chemotaxis, pharmacokinetics, animal models, gene therapy, and imaging technology.

### **MPH621 SEMINAR IN APPLIED CLINICAL EPIDEMIOLOGY AND HEALTH SERVICE RESEARCH**

Course Director: Ethan Halm, MD, MPH

Full Year Course Meeting on Alternate Weeks

Friday Mornings 8:00 to 9:15am

Years Taught 3

3 credits

This seminar focuses on current methodological, analytical and logistical issues in clinical epidemiology and health services research. The course helps participants develop, refine, implement, and evaluate a quantitative clinical epidemiology or health services research study. Attendees also learn to critically evaluate the methodological strengths and weaknesses of key clinical research designs including: retrospective and prospective cohort studies, patient and physician survey research, secondary dataset analysis, and interventional studies. All seminar members must present a research proposal during the one year period, as well as participate actively in critique and feedback to other presenters. The course is primarily intended for clinician trainees in the MPH outcomes research track or Masters of Science in Clinical Research (MSCR) program.

Pre-requisites:           Introduction to Epidemiology  
                                  Introduction to Biostatistics

Students who are not clinical fellows matriculated in the MPH or MSCR program must receive permission from the Course Director prior to enrolling in this course.

This class meets on alternate weeks and is graded on a Pass/Fail basis.

**MPH623 APPLIED ANALYSIS OF EPIDEMIOLOGIC AND OUTCOMES RESEARCH DATA**

Course Director: Juan Wisnivesky, MD

Spring Term

Thursdays

3 credits

Years Taught 1

This course is focused on learning the application of statistical methods for the analysis of epidemiologic and patient-oriented observational data. The emphasis will be on hands-on experience, involving case studies with real data and using the statistical software SPSS. The focus will be on choosing and on implementing the appropriate statistical methods to analyze and interpret different types of data. Attention will also be paid to the theory behind these tests and on testing the validity of the assumptions. The course will cover data management, exploratory data analysis, model formulation, goodness of fit testing, and other standard procedures, including linear regression, analysis of variance, logistic regression, and survival analysis. Prospective students are invited to propose a data set of their choice for use as case study material. The grade will be based on the homework, midterm, and a final exam. This course will be particularly well suited to students who are actively involved in an epidemiology, outcomes, health services, or survey research project that is entering the data analysis phase.

Pre-requisites: Introduction to Biostatistics, some knowledge of linear regression preferable.

<sup>NEW</sup> **MSCR ADVANCED TOPICS IN CLINICAL RESEARCH**

Course Director: Ethan Halm, MD, MPH

Spring Term

Mondays

3 Credits

**TBD**

# GLOBAL HEALTH

## **MPH700 INTRODUCTION TO GLOBAL HEALTH**

Course Director: Nils Hennig, MD, PhD and Natasha Anushri Anandaraja Wagner, MD

Autumn Term

Tuesdays

Years Taught 3

3 credits

This course provides an introduction to the major concepts and principles of global 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 varied challenges and controversies. Students will learn about the establishment of global health priorities, developing an appreciation for issues related to underserved populations. Students will learn about the major players in the global arena and challenges of financing. 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. At the end of the course, students will be introduced to the most important 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 Track. A high level of classroom participation with active contributions to classroom discussion and debate will be expected.

## **MPH705 UNDERSERVED POPULATIONS**

Course Directors: Sigrid Hahn, MD; Ramon Murphy, MD and Jonathan Ripp, MD

Spring Term

Tuesdays

Years taught 1

3 credits

Though most of the major issues in global health today concern underserved communities in the developing world, there are numerous underserved populations here in the United States as well, with significant variability in health status among different communities. This course will examine these inequities, with a particular emphasis on their public health consequences. We will begin with a discussion of the social determinants of health, explore various system-based inequities, consider a variety of underserved populations and finish with a consideration of possible solutions. Specific topics to be explored include racial disparities in health, access to care, uninsured or underinsured populations, urban city and rural living, immigrant and migrant health, exploited workforce groups, underserved children, and the "forgotten elderly." This course will illuminate how the health of the many groups living within the United States remains unequal.

### **MPH707 REFUGEE HEALTH**

Course Director: Ramin Asgary, MD, MPH, MSc

Spring Term

Thursdays

Years Taught 2

2 credits

Refugees confront problems beyond geographic dislocation from their homes; they face socio-cultural, economic, and health consequences on an individual level as well as on a broader population level. Displacement may result from natural disasters or man-made problems such as civil unrest and war. In many recent circumstances, population dislocation has resulted from a combination of both.

This course will focus on the public health impact of displacement on populations. The course will explore: the major causes of diseases and death; rates of morbidity and mortality and how they are measured; public health surveillance during the emergency and immediate post-emergency phases; how to identify the most vulnerable groups; ensuring an adequate and safe food supply, proper sanitation, and acceptable shelter; understanding the public health challenges such as epidemics; and the broad psycho-social impact of being labeled a refugee.

### **MPH709 CAREERS IN GLOBAL HEALTH**

Course Directors: Sigrid Hahn, MD and Natasha Anushri Anandaraja Wagner, MD

Full Year Course

Once per month

Years taught 1

2 credits

This course exposes students to career options in global health. Through informal discussion with global health practitioners working in a variety of settings, students will gain an understanding of the scope of career options and address career development. Prior practitioners have included physicians and public health experts from domestic and international non-governmental organizations, and federal organizations such as the U.S. Public Health Service.

### **<sup>NEW</sup> MPH710 GLOBAL ENVIRONMENTAL CHANGE**

Course Director: Enrique Cifuentes, MD, PhD; Leo Trasande, MD and Sigrid Hahn, MD

Autumn

Mondays

What does globalization mean to medicine, environmental health and sustainability?  
How are political and economic driving forces contributing to rapid and large scale ecological changes?  
What is environmental justice?

These are some of the critical questions that will be addressed in this course.

Global environmental changes (*GECh*) involve profound worldwide shifts in different geographic, cultural and socioeconomic domains and are caused by unprecedented population growth, human activities and consumption of natural resources, often resulting

in health risks and political unrest. In this course we will focus on both the public health and social consequences of *GECh*, from a perspective that foregrounds questions of equity, ethics and policy.

The topics included in this course build upon available evidence from different parts of the world, particularly from those regions affected by natural and man made disasters, land use changes, environmental refugees, poor housing, export of hazardous waste, food and water insecurity, as well as environmental injustice. We will discuss the public health policy implications of an out – of – balance global ecosystem, and the major challenges it represents to physicians, scientists, institutions, governments and concerned communities.

In this course, we will address the critical concepts of spatial scale and social determinants of environmental health risk. Our approach - while global- will often unfold on a local scale by using evidence from case studies. Special attention will be paid to concepts such as trans-boundary concerns, environmental racism and advocacy.

### **MPH717 MATERNAL & CHILD HEALTH IN DEVELOPING COUNTRIES**

Course Directors: Nils Hennig, MD, PhD and Natasha Anushri Anandaraja Wagner, MD  
Winter Term

Wednesdays

Years Taught 2

3 credits

This course introduces the student to the problems facing mothers and children in developing countries. They will learn how infection, malnutrition and maternal-child health services affect the outcomes of pregnancy and impact child survival and development. HIV/AIDS, malaria, diarrheal disease, and community based interventions will be examined in detail. The course will explore potential solutions to maternal-child health problems. A main focus of the course will be evidence-based interventions. Teaching is skill based and students will be involved in intensive small group problem solving exercises. Students will learn the necessary skills to be part of the solution regarding the problems facing underserved mothers and children in the developing world.

### **MPH720 GLOBAL HEALTH FOR PHYSICIANS**

Course Directors: Sigrid Hahn, MD; Nils Hennig, MD, PhD; Jonathan Ripp, MD and  
Natasha Anushri Anandaraja Wagner, MD

Meets monthly from September - June

3 credits

This course is part of the two-year Global Health Residency Track (GHRT) at Mount Sinai School of Medicine. Its goal is to provide committed resident physicians with the skills, knowledge, and experience to practice independently in an underserved global health setting. It includes monthly seminar series on relevant global health topics and an intensive workshop for the program's senior residents, preparing them for their fieldwork.

This course is restricted to physicians only. Physicians other than Mount Sinai employees, residents or fellows must have written permission of the Course Director and the Director of the MPH Program.

**MPH795 GLOBAL HEALTH CONFERENCE**

Course Directors: Sigrid Hahn, MD; Nils Hennig, MD, PhD; Jonathan Ripp, MD and  
Natasha Anushri Anandaraja Wagner, MD

Yearly seminar held in Spring Term

1 credit

This full-day conference focuses on a timely topic in global health, such as climate change and human health or the public health impact of the Iraq war. Through readings, lectures, a panel discussion, small group sessions, and a writing assignment, students will have the opportunity to learn about complex global health issues, with a focus on solutions.

To receive academic credit for this conference, students are required to attend the conference and submit a writing assignment.

Previous and Current Topics:

**2009: Topic to be determined**

**2008: Environmental Crisis and Its Impact on Human Health**

**2007: Health Consequences of the War in Iraq**

**2006: Evidence-based Solutions to Global Health Problems**

## **PRACTICUM, THESIS, INDEPENDENT STUDY & ELECTIVE**

### **MPH090 PRACTICUM**

Any Term

0 Credits

The Practicum experience provides the student with an exciting opportunity to implement and practice lessons learned in the classroom, offering the possibility to integrate knowledge and expose the student to new and exciting prospects for future professional development. (Please refer to the STUDENT HANDBOOK.)

### **MPH098 MASTER'S THESIS RESEARCH (FOR MD-MPH STUDENTS ONLY)**


Dual MD-MPH Program students may register for this as one of their clinical electives in either the third or fourth year of medical school. This is a four-week elective that will enable the student to dedicate time to completing his/her Master's Thesis.

Prior to beginning this rotation, a student must complete the MPH Program's Elective Approval Form and register for the elective. The Thesis Advisor will be the instructor for this elective.

### **MPH099 MASTER'S THESIS**

4 credits

Students register for their Master's Thesis on or before the Winter Term of their second year while preparing to submit their Thesis.

Please refer to the *Guide To Completing the Master's Thesis* [Guide to Completing the Master's Thesis](#)  as a resource for the steps that need to be taken in fulfilling the Master's Thesis requirement.

## **MPH095 INDEPENDENT STUDY**




An Independent Study is an elective option, providing the student with an opportunity to delve more thoroughly into an area of public health of specific interest to him/her.

Please note that an Independent Study Proposal should be submitted at least six weeks prior to the anticipated start of the proposed project/course of study. This is to ensure that the goals meet the overall objectives of the Master of Public Health Program before a student commits any time and energy. Approval of a form submitted less than six weeks of the anticipated start of the project/course of study will not be guaranteed and the student is responsible for assuming any risk that this may entail. Approval, when granted, is conditional upon the student completing all of the outlined requirements. The student must submit a Postscript Report and request that the faculty sponsoring the Independent Study submit an Evaluation Form.

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. Each student may complete no more than two independent study projects.

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. It is important to note that generally speaking 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. Students should not expect independent study projects to exempt them from core course requirements without approval by the Track Academic Advisor and the Program Director.

Steps towards formalizing an Independent Study:

1. Meet with your Academic Advisor to discuss and plan the Independent Study.
2. Complete the [Independent Study Proposal Form](#). 
3. Meet with the Program Director to discuss your Independent Study.
4. Complete the project/course of study once approved.
5. Complete the [Independent Study Postscript Report](#). 
6. Request that your Faculty Sponsor complete the [Independent Study Evaluation Form](#)  and submit it to the Program Coordinator.
7. Review Postscript Report and Evaluation with your Academic Advisor.

## **MPH096 Elective offered in another Program or Institution**

A student may decide to enroll in a course offered by another Program here at Mount Sinai or elsewhere. If a student wishes to take a course for elective credit from Mount Sinai School of Medicine or Mount Sinai [Graduate School of Biological Sciences](#), please consult the appropriate School's Course Catalogue. (The Course Catalogues for the Medical School and the Graduate School of Biological Sciences are available online.)

Please submit a course description and a syllabus from the Institution offering the elective course, together with a completed Elective Approval Form, to the Program Director of the Master of Public Health Program.

**Approval must be given from the Master of Public Health Program Director prior to enrolling in a course in another Program or Institution.** The student's request should be submitted on the Elective Approval Form and he/she must receive approval before the course begins.

[Elective Approval Form](#) 

An official transcript must be sent from the sponsoring institution upon the completion of the elective in order for it to appear on a student's MPH transcript. Official transcripts must be sent directly from the institution to the Program's Administrative Assistant.