

# MASTER OF SCIENCE GLOBAL HEALTH (MSGH)

## **MSGH 405-DL Foundations of Global Health and Global Burden of Disease (1 Unit)**

This course introduces the student to global health epidemiology, international public health, and global medicine. Students will gain knowledge of some of the major global health problems, their socioeconomic determinants, and their impact on individuals, populations, and societies. This 10-week course is structured around a series of pre-recorded lectures, readings, short answer questions, and an interactive discussion forum. The course is designed to be taken by students of widely varying backgrounds who may be interested in pursuing further study and/or careers in global health.

## **MSGH 408-DL Biostatistics and Epidemiology (1 Unit)**

This is an introductory course designed for individuals interested in evaluating, measuring, and studying global health. Topics include: descriptive statistics and measuring disease burden; probability and distributions; statistical inference; methods for studying and comparing populations; global health research; survival analysis; and cause and effect. Real-life applications are discussed for each topic as well as overall application of biostatistics and epidemiology to the field of global health.

## **MSGH 410-DL Research Methods (1 Unit)**

Research Methodology is an intermediate course in the design, methodology, performance, analysis, ethics, presentation and publication of global health research. Areas addressed include: creating the research question and hypotheses; research ethics with human subjects; cross-sectional/ecological studies; case-control studies; cohort studies; clinical trials; meta-analysis; data analysis; abstracts and conference presentations; manuscript preparation and publication. The course will concentrate on broad foundational topics of research methodology using examples and discussions applicable to global health. Weekly practical assignments and reviews of iconic global health papers will be incorporated to assess your knowledge and stimulate discussion. (Required: MSGH 408-DL Biostatistics and Epidemiology.)

## **MSGH 417-DL Global Health Systems (1 Unit)**

Overview of the structure of the U.S. health systems followed by a selective international comparison of other health delivery systems including their relationships to social policies and economic factors.

## **MSGH 419-DL Global Bioethics (1 Unit)**

This course explores major themes in contemporary bioethics and the role of cultural norms. Students examine the intersection of health and international human rights as it relates to health equity and access to health services.

## **MSGH 421-DL Global Health, Globalization, and Public Policy (1 Unit)**

During the last three decades, there has been a proliferation of new actors in the field of global health policy, which has transformed international health governance into what we will call global health governance. It is in recognition of this paradigmatic shift that this class will study this complex web of relationships between globalization, public health governance and the art of policy-making. We will do this by exploring the diverse set of actors in the field, dissecting the different ways of framing and modelling public health policy, and highlighting the challenges faced by the global community. We will also visit the effects of intellectual property rights and humanitarian assistance in the context of global health crises. (Required: MSGH 405-DL.)

## **MSGH 427-DL Grant Writing, Development, and Fundraising (1 Unit)**

Students will learn how to secure grants to fund global health initiatives. Every global health initiative requires resources. Although volunteer efforts are an important part of any global health program, every other aspect will require funding. Therefore, grant writing and fundraising are foundational skills for global health professionals. This course will expose you to the common practices in these important activities, which involves identifying methods for assuring health program sustainability, developing strategies that strengthen community capabilities for overcoming barriers to health and well-being, planning evidence-based interventions to meet internationally established health targets, and developing proposals to secure donor and stakeholder support.

## **MSGH 450-DL Sustainability of Global Health Initiatives (1 Unit)**

This course addresses how to address and maximize sustainability of global health initiatives, including burdens on infrastructure, environment, and human systems. (Required: MSGH 405-DL Foundations of Global Health and Global Burden of Disease.)

## **MSGH 452-DL Global Nutrition: Science, Policy, and Perspectives (1 Unit)**

Explores the intersection between nutrition science and policy from a variety of community-level, national, and global perspectives. Topics include the role of nutrition in health and development across the lifespan; nutritional assessment and surveillance; types of nutrition interventions; and the nutrition transition. (Required: MSGH 408-DL Biostatistics and Epidemiology and MSGH 410-DL Research Methods)

## **MSGH 454-DL Global Health Management & Strategy (1 Unit)**

Every year billions of USD are spent on global health programs with the ultimate goal of improving global health. This course will look at the foundations of management, including how managers use quantitative and qualitative data to make decisions and manage resources. The course will also use the case study methodology, asking students to play the role of a global health managers faced with a real-life management decision. After students play the role of global health manager, the decisions made by the actual manager will be discussed. Students will reflect on their own experiences with managers or as managers.

## **MSGH 456-DL Access to Health and Medicines (1 Unit)**

An estimated one-third of the world's population lacks access to essential medicines; in the poorest parts of African and Asia, this estimate rises to over half of the population. Understanding the multifaceted barriers to medicine access is invaluable to the multidisciplinary team of global health advocates, including clinicians, policy makers, program administrators, donors, and leaders in the public and private sectors alike. This course will exemplify global health teamwork from policy to patient as students explore critical issues in rational selection and use of medicines, pharmaceutical regulation and financing, supply chain management, and health systems strengthening.

## **MSGH 458-DL Global Health and Technology (1 Unit)**

An introductory course positioning technology in the global health landscape. Health systems of the future will increasingly be dependent on technology; how the technology value-proposition is leveraged will be a critical determinant of health outcomes, nowhere more so than in developing countries and resource-scarce settings (DC&RSS). Topics: health technology - what's in a name (unpacking the term); why health technologies matter (linking technologies to burden of disease, healthcare services, quality of care and health outcomes); health technology innovation, introduction/adoption and utilization challenges in DC&RSS; the complementary roles of health technology assessment, regulation and management; health-related technologies and infrastructure as the new frontier for achievement of improved health status in DC&RSS.

## **MSGH 460-DL Planetary Health: Health in the Anthropocene (1 Unit)**

As an emerging scientific field within and beyond global health, planetary health seeks to unravel the interlinkages between environmental health, human health, and the societal aspects on which these two depend. Beyond just a scientific discipline, planetary health is also a movement that seeks to leverage these new understandings to find solutions that integrate the well-being of our biosphere. It does so by taking a transdisciplinary and multisectoral approach to understanding the indivisible bidirectional relationship between the environment and well-being. As an introductory level course to planetary health, the course will focus on the major elements of current planetary health research, policy-action, and practice. A central theme of the course will be the use of a social justice and equity lens to the planetary health challenges we are facing and how this lens can inform more comprehensive solutions. Complexity, movement building, governance, and interconnection within nature and their relation to planetary health will also be critical themes explored during this course.

#### **MSGH 480-DL Global Health Leadership (1 Unit)**

Persistent and continued global health inequities and inadequate responses to emerging global health crises highlight major gaps in global health leadership and the need for effective global health leaders at all levels. This course is an introduction to global health leadership and presents leadership theories and practices at individual and organizational levels. In this course, students will be introduced to Culturally Endorsed Leadership Theory (CLT). The course will examine principles of leadership and practical global health leadership skills for leading change and addressing problems in global health settings, including stakeholder engagement at all levels; developing strong partnerships, teamwork and collaborations; sociocultural awareness and effective communication. This course also explores individual leadership characteristics including adaptability, patience and humility.

#### **MSGH 580-DL Practicum Course (1 Unit)**

The culminating experience for the MSGH program. Students should apply the competencies acquired throughout their MSGH training into a real world setting. This can include partner rotations abroad, collaborating with global projects virtually or “global” projects in a local community. In fieldwork, students are not simply observers, but able to add value global partners’ work through skills gained through the MSGH. (Required: Completion of any four of the following courses; MSGH 405-DL, MSGH 408-DL, MSGH 410-DL, MSGH 417-DL, MSGH 419-DL, MSGH 480-DL. All six courses must be completed by the end of the second term of the Practicum course.)

#### **MSGH 590-DL Thesis Research (1 Unit)**

Thesis Research.