# 2024-25 GLOBAL HEALTH EQUITY

MCW
GRADUATE SCHOOL

Degree Offered: Master of Science

#### **Program Description**

The Master of Science in Global Health Equity program at the Medical College of Wisconsin was created to meet the growing demand of global health professionals. Our small cohorts make it possible for local and intentional mentoring from faculty who have a wide range of global health experience. Students will conduct a global health project with one of our local or international partners. Our flexible, interactive program allows students to choose from a variety of elective courses to gain expertise in areas they are most interested in. Full-time and part-time study are allowed.

# **Admission Requirements**

In addition to the general <u>Graduate School admission requirements</u>, this program has additional specific requirements.

Students should have a strong foundation in quantitative, behavioral, and biological sciences

# **Credits Required to Graduate**

36 credits

#### **Required Courses**

#### **29219 Introduction to Global Health Equity.** 3 credits.

The Centers for Disease Control and Prevention have reported that ten great public health achievements worldwide in the last decade have been their science and programmatic role in global health including the prevention of HIV/AIDS, tuberculosis control, access to safe water and sanitation, control of neglected tropical disease, reductions in child mortality, vaccines, malaria prevention and control, and tobacco control. In seeking to address and understand complex global health concerns, the MS GHE Program is uniquely positioned to enlist multidisciplinary faculty to present the world's burden of disease and propose solutions to decrease health disparities. A focused approach to local and global health issues adds value to public health professionals' roles. As the Unites States becomes increasingly more globally diverse, there is a growing need to understand and serve the global populations in our own neighborhoods and communities. By training our future public health professionals to be culturally sensitive and world thinkers they can better understand the unique distinctions each culture brings.

#### 29220 Statistics for Global Health. 2 credits.

This course will provide a foundation for statistical analysis in global health research using Stata software. First, we will cover research design and data collection, including questionnaire design, sample selection, sampling weights and data cleaning. Second, we will emphasize the use of code or command files in Stata to ensure that students are taught how to write programs. Third, the students will learn how describe statistical results for technical and non-technical audiences. The students will be introduced to univariate, bivariate, logistic regression, and linear regression analyses. The students learn to formulate a

research question that addresses a sustainable developmental goal, analyze data using existing international data sets, and interpret the results. They will learn to present their results to the scientific community as well as to local communities and will prepare a final research paper.

# 29230 Epidemiologic Research Methods in Global Health Equity. 2 credits.

This course was developed specifically for the Master of Science in Global Health Equity Students. This course will tie the application of Epidemiology to Global Health and develop student's knowledge and skills in developing a research question, conducting literature reviews, analyzing data and succinctly communicating a research project in written and oral formats. This will be a required course for MS GHE students and will be a foundational base for future course work as well as the student's final thesis work project and paper.

#### **29236 Digital Storytelling for Public Health.** 1 credit.

The translational aspects of Public Health sciences require creative approaches to stakeholder engagement, communication, and trust building. Digital storytelling has become recognized methodology to build relationships for community engagement as well as generate useful qualitative data. The latter are particularly useful for developing cultural context in health communication. This course will provide an overview of how indie filmmaking techniques can be used to efficiently produce digital stories. We will also present examples of how this process facilitates community (stakeholder) engagement for research projects.

# 29239 Ethics and Global Health. 3 credits.

This course will be in the intersection between bioethics, global public health, and international biomedical research and practice. It will look at global health issues and their ethical challenge from the perspective of culturally diversity communities and their local experience related to health and health care. This course engages in a debate of the main ethical issues of clinical practices in health care and research institutions and health care actions in global health. It aims to provide students resources and practical skills to handle ethical dilemmas and lead decision making processes in clinical contexts, related to research with human subjects, healthcare delivery, and public health policies. To achieve this goal, this course is divided into two parts: First, it examines the foundational structures of bioethics, letting them to be challenged by pluralistic worldviews. Second, it discusses ethical dilemmas and concrete clinical situations in which students are challenged to lead decision-making processes in order to deal with moral stress and to address ethical dilemmas, at the same time that high ethical standards are considered. In addition, participants will be exposed to firsthand data from ethnographic and participatory action research in global health and challenged to read authors that show especial consideration for the voices and experiences of vulnerable and historical marginalized populations.

# **29275 Global Health Consulting and Research Methods.** 3 credits.

This course is an applied, project-focused, "real-world" overview for individuals in healthcare consulting. Students will learn about planning, executing, and evaluating research that is applicable to advising with respect to relevant needs to help organizations serve their stakeholders more effectively, efficiently, and efficaciously. This course provides you with an introduction to a range of established and emerging consultancy practices such as design thinking, open innovation and sourcing, stakeholder journey mapping, and agile methodology.

#### **29279 Thesis Work and Internship Preparation.** 1 credit.

Experiences in global health have proven to be invaluable in shaping the interests and careers of students. Participation in global health educational and research activities is associated with increased likelihood of addressing health disparities and the social determinants of health. However, there are also potential pitfalls associated with sending students to research arenas in which they are unfamiliar- processes are different, the resources available for research may be limited, there are language and cultural barriers, and students face safety issues pertaining to travel and occupational exposures. This type of experience is a means for professionals-in-training to learn important lessons about health disparities and cultural diversity. This course will provide a step-by-step guide to prepare students for successful thesis work.

#### 29299 Master's Thesis. 6 credits.

Thesis work is a required component of the MS in Global Health Equity program. It is a planned, supervised, and evaluated practical experience designed to enhance and complement the educational training. Students will engage in research or a community engagement project. Students are encouraged to choose a thesis placement that aligns with their career interests. Global and local placements are available with MCW's established partners.

#### Required Courses as Needed

#### 29002 Thesis Work Continuation. 0 credits.

This is a form of registration available to students who have completed all of the required coursework, including thesis credits but have not yet completed the writing of the Thesis. Continuation status is limited to three consecutive terms following the completion of Thesis credits.

#### **Elective Courses**

#### 29100 Community Health Needs Assessment. 2 credits.

Understanding the health needs of communities is central to the success of programs designed to address the most pertinent health challenges of vulnerable communities. Participants will get an understanding of why community health needs assessments are necessary. They will delve into the steps taken in designing, conducting, and analyzing the findings of a health needs assessment, with a focus on rural communities in developing country settings. They will get insights on the types of data needed for a health needs assessment and the indicators used for this type of assessment in the context of rural communities in low-income country settings.

# **29110 Introduction to Chronic Diseases in Global Health.** 2 credits.

This course will provide an introduction to chronic disease. The major groups of chronic diseases that will be discussed in this course include cardiovascular disease, cerebrovascular disease, major forms of cancer, diseases of the respiratory tract, metabolic and digestive diseases, musculoskeletal diseases, and neurodegenerative diseases. Specifically, it will describe the major causes of chronic disease morbidity and mortality around the world, and how the risk of disease varies with regions. It will discuss major public health efforts to reduce disparities in chronic health around the world. Students will have the opportunity to develop country reports on specific chronic diseases, reports of global and public health efforts within

those countries, as well as demonstrate the ability to identify opportunities for specific health interventions and create evidence-based programs aimed at chronic diseases with a focus on cultural values, integration of community assets and resources, and utilization of the expertise of identified global health professional and groups with similar interests.

#### 29150 Global Environmental Health. 3 credits.

Global Environmental Health will examine environmental problems that manifest at a global scale, with implications for human health and health equity. This course provides (1) a survey of major global environmental issues impacting human health, and (2) a focused examination of global climate change, related health impacts, and approaches to environmental sustainability, mitigation, and resilience. Issues to be considered include urbanization, air quality, water and sanitation, energy, food systems, biodiversity, waste, drivers of emerging diseases, climate change, and green infrastructure. The course will consider relevant social, economic, and political factors and approaches to controlling or eliminating risks. We will apply a global health equity perspective, examining causes and effects of environmental issues and implications for vulnerable populations. Environmental health issues in both developed and developing countries will be presented.

# 29160 Infectious Disease Epidemiology. 2 credits.

This course addresses the epidemiological, clinical, and practical issues important to the study of infectious diseases of public health significance. The epidemiology of selected infectious diseases commonly occurring nationally or internationally, or of potential use as a bioterrorism weapon, will be discussed in detail. Subjects discussed include immunizations, microbiology tools for the epidemiologist, nosocomial infections, outbreak epidemiology and emerging infectious diseases.

#### **29165 Ethics in Qualitative Research.** 2 credits.

This course examines ethical considerations beyond regulatory approval. Together, we assist in laying a foundation in ethical qualitative research practices as well as considering ethical treatment of special populations, and the development/evolution of one's own ethical stance.

# **29235 Fragile Lives: Understanding Vulnerability in Old Age.** 2 credits.

In bioethics, vulnerability is a very important concept along with ethical principles such as autonomy, justice, beneficence, integrity, and dignity. The notion is an integral part of several international ethical and legal guidelines such as the Nuremberg Code and the Belmont report which aimed to protect the vulnerable from inhuman medical practices. Despite being at the heart of bioethical inquiry, the concept of vulnerability has no clear-cut definition. Vulnerable populations are generally believed to include (but are not limited to) minors, incapacitated adults, prisoners, institutionalized individuals, minorities, refugees, nomads, homeless persons, unemployed, poor persons, pregnant women, women, and older persons. This labeling approach to vulnerability has been strongly criticized in the bioethics literature for being broad and thus lacks discrimination of individual and situation differences.

# **29237 Researching, Analyzing and Profiling Global Health TIPS1.** 2 credits.

This course grows students' awareness of and engagement with significant, urgent, and uncertain global healthcare (HC) issues and policies, with an emphasis on their equity considerations and outcomes. This course provides data and evidence-driven "real-world" contexts and applications. Students will examine subject matter areas that their research has the highest potential of producing valued guests (i.e., analyzing data and translating

evidence and science into policy) for stakeholders, especially HC organizational leaders, practitioners, and policymakers. Practical knowledge will be developed in conducting issues research and policy analysis, shaping different briefs and communicating findings for leadership audiences, developing partnerships, promoting, and implementing evidence-based interventions. Lastly, it aims to connect how students can help move data and evidence-based insights about problems toward desired actions and improvement of health and medical practices.

#### 29238 Global Health Initiatives. 2 credits.

Global Health Initiatives (GHIs) such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund), the President's Emergency Plan for AIDS Relief (PEPFAR), and the World Health Organization (WHO) among others, have been instrumental in the rapid acceleration of programs targeting specific diseases such as HIV, TB, malaria, malnutrition, maternal and child health in low- and middle-income countries (LMIC). At the same time, other non-communicable diseases such as cancer, mental health, substance use, diabetes and cardiovascular disease have been relatively neglected in LMICS, even as the global burden such diseases create is growing. The purpose of this course is to critically examine the GHIs' roles in addressing public health emergencies and the effects of these efforts on the health care system and health of populations living in LMICs.

The first part of the course provides an overview of the major political, financial, and social structural organizations involved in global health policy. These include international development and financial organizations and institutions, national governments, nongovernmental organizations rooted in civil society, and private sector entities. In the second half of the course students explore specific case studies in global health policy that illustrate policymaking and implementation successes and challenges.

# 29240 Multicultural Mental Health Guidelines in Native American Populations. 3 credits.

This course is designed to familiarize students with essential, and largely Pan-cultural information about the mental health issues facing the First Nations populations of North America. First Nations persons include those also generally referred to as American Indians, Alaska Natives, and Native American Indians. Demographic, historical, sociopolitical, and inter- and intra-ethnic contexts critical to understanding the First Nations will be addressed. Specific knowledge constructs such as historical context, identity formation, acculturation, enculturation, language, family and community values, religion and spirituality. Traditional beliefs about health and illness, gender role socialization, and social class are emphasized. Attention will be given to contemporary issues facing the First Nations that influence service delivery and the receipt of care. Culturally relevant interventions are presented.

# **29245** Health and Forced Migration. 2 credits.

Introduction to displaced populations and refugee health with special attention to vulnerable populations; the intersection of human rights, health policy, and health systems; and the health consequences of forced migration. This course will describe some aspects of the causes for populations to flee their homelands, common ways refugee camps are set up and structured, frequently seen health effects of displaced populations, specific vulnerable sub-groups within displaced populations, and the legal and ethical challenges of the displaced. This course is suitable to anyone interested in the effects of forced migration on population health.

# **29250** How to Build Health Research Partnerships with Native American Communities. 2 credits.

Working with Native American communities to conduct health research presents unique challenges. Many of these challenges align with community-based participatory research principles. However, the unique socio-political context of Native American tribal groups requires that health professionals reach beyond standard best practices. This course will provide the contextual information to navigate cultural competency, historical distrust, and government-to-government policy necessary to build durable health research partnerships with Native American groups.

# 29295 Readings and Research. 1-2 credits.

This is an independent study course; the student is to independently conduct research in their chosen thesis topic. The number of credits selected by the student determines the number of hours per week that must be dedicated to working on the Readings and Research plan. The student is responsible for finding a faculty member who is willing to work with the student; together they will establish learning goals, deliverables, resources, timeline, and mechanism for feedback.

#### 29325 Global Maternal and Child Health. 2 credits.

Global Maternal and Child health is an essential elective to the MS Global Health Equity program as maternal and child health is a large field in which many students have interest in pursuing as a career. The course instructor has specific expertise in this field and will provide as well-rounded perspective of global maternal and child health issues. The current curriculum does not offer a course on this topic, this course is an essential addition to the program.

Electives offered at Marquette University:

**5461 Comparative Health Politics and Policy.** 3 credits.

**7150 Outbreaks, Epidemics and Pandemics.** 3 credits.

**7931 Politics of US Health Care.** 3 credits.

Contact information: gradschool@mcw.edu | (414) 955-8218