# **GLOBAL AND COMMUNITY HEALTH (GCH)**

### 200 Level Courses

GCH 205: Global Health. 3 credits.

This course examines the biological and social aspects of major international health issues, especially in the areas of infectious disease, nutrition, and environmental health. Other topics include population groups with special risks, policies and programs designed to reduce health inequalities, and basic methods used to study global health. Offered by Global and Community Health. Limited to three attempts.

Mason Core: Mason Core, Global Contexts, Global Understanding, Just Societies (https://catalog.gmu.edu/mason-core/)

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 270:** Applied Human Anatomy and Physiology I. 4 credits. Develops a comprehensive understanding of the interrelationships of anatomy and physiology as observed in the human organism, and introduces application of knowledge to health, disease and dysfunction. Emphasis on musculoskeletal, nervous, cardiovascular, respiratory and integumentary systems.Offered by Global and Community Health. Limited to three attempts.

Schedule Type: Laboratory, Lecture

### Grading:

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 271: Applied Human Anatomy and Physiology II. 4 credits. Continued development of a comprehensive understanding of the interrelationships of anatomy and physiology as observed in the human organism, and introduces application of knowledge to health, disease and dysfunction. Emphasis on musculoskeletal, nervous, cardiovascular, respiratory and integumentary systems. Offered by Global and Community Health. Limited to three attempts.

# Registration Restrictions:

Required Prerequisites: (HHS 270<sup>C</sup>, 270<sup>XS</sup> or GCH 270<sup>C</sup>).

<sup>C</sup> Requires minimum grade of C.

Schedule Type: Laboratory, Lecture

#### Grading

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### 300 Level Courses

GCH 300: Introduction to Public Health. 3 credits.

Explores the principles and foundations of public health and its practice in the United States. Emphasizes the public health system's contributions to improving individual, community, and population health.Offered by Global and Community Health. Limited to three attempts.

Schedule Type: Lecture

# Grading:

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 305: Introduction to OneHealth. 3 credits.

Introduces the transdisciplinary One Health approach of solving complex health issues by recognizing the interconnectedness of human health, animal health and environmental health. A One Health approach to health issues is important because the majority of diseases in humans are spread from animals thus successful public health interventions require the cooperation of human, animal, and environmental health communities. Offered by Global and Community Health. Limited to three attempts.

Recommended Prerequisite: GCH 205 or EVPP 210 or BIOL 213

Schedule Type: Lecture

#### Grading:

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 310: Health Behavior Theories. 3 credits.

Examines theory for understanding health and health behaviors and their role in the development, implementation, and evaluation of public health programs. Offered by Global and Community Health. Limited to three attempts

Schedule Type: Lecture

#### Grading:

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 325: Stress and Well-Being. 3 credits.

Explores the influences of stress on population-based health issues. The causes and pathways of the stress experience are explored from an ecological public health perspective. Theoretical aspects of stress and coping are considered, along with methods for relieving and preventing the stress response in both individuals and communities. Offered by Global and Community Health. Limited to three attempts.

Mason Core: Mason Core, Social/Behavioral Sciences (https://catalog.gmu.edu/mason-core/)

Schedule Type: Lecture

# **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

# GCH 332: Health and Disease. 3 credits.

Introduces the etiology, control, and prevention of human disorders from a public health perspective. Focuses on health problems and potential prevention throughout the life span.Offered by Global and Community Health. Limited to three attempts.

Schedule Type: Lecture

# **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 335: Applied Health Statistics. 3 credits.

Emphasizes the statistical concepts and procedures used in applied public health practice and research. Students will learn to use SPSS to analyze, interpret, and present statistical findings. Offered by Global and Community Health. Limited to three attempts.

XS Requires minimum grade of XS.

**Recommended Prerequisite:** Any Mason Core quantitative reasoning course.

Schedule Type: Lecture

### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 350: Health Promotion and Education. 3 credits.

Introduces the principles of health promotion and education, including history; philosophical and theoretical foundations; professional preparation, ethics, and responsibilities; and work settings. Assessment of health information/sources and the development of effective health promotion and education strategies for diverse populations are emphasized.Offered by Global and Community Health. Limited to three attempts.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 360: Health and Environment. 3 credits.

Examines principles and methods, risk factors, prevention and control, and policies related to the aspects of human health determined by biological, physical, and chemical factors in the environment at the local, regional, and global levels.Offered by Global and Community Health. Limited to three attempts.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 370: Sexuality and Human Behavior. 3 credits.

Introduction to human sexual behavior with an emphasis on the interaction between psychological, social, and biological factors. Topics include sexual differentiation and development, sexually transmitted infections and HIV, sexual orientation, patterns of sexual behavior, and the sexual health of individuals, communities, and global populations. Offered by Global and Community Health. Limited to three attempts.

Schedule Type: Lecture

### Grading:

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 376:** Health Ethics, Leadership, and Advocacy. 3 credits. Examines legal and ethical issues in public health practice and the skills necessary for effective leadership. Includes personal and organizational ethics, management and leadership styles, and public health advocacy. Offered by Global and Community Health. Limited to three attempts.

Recommended Prerequisite: GCH 350.

Schedule Type: Lecture

### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 380: Public Health Research Methods. 3 credits.

Emphasizes the formation of public health research questions and selection of appropriate study designs to address them. Offered by Global and Community Health. Limited to three attempts.

Specialized Designation: Mason Impact.

### **Registration Restrictions:**

Required Prerequisites: GCH 300<sup>C</sup> or 300<sup>XS</sup>.

C Requires minimum grade of C.

XS Requires minimum grade of XS.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

# **400 Level Courses**

**GCH 405:** *Global Health Interventions: History and Systems.* 3 credits. Examines the history, development, and implementation of international health policies and programs, with an emphasis on maternal and child health, undernutrition, and infectious diseases.Offered by Global and Community Health. Limited to three attempts.

Recommended Prerequisite: GCH 205

Schedule Type: Lecture

#### Grading:

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 406:** Global Health Interventions: Emerging Issues. 3 credits. Examines strategies for addressing emerging global health issues, with an emphasis on noncommunicable diseases, aging, mental health, and injuries. Offered by Global and Community Health. Limited to three attempts.

Recommended Prerequisite: GCH 205.

Schedule Type: Lecture

# **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 410: Physical Activity and Public Health. 3 credits.

Examines the theory, discipline and practice of the emerging field of physical activity and public health. At the population level, physical activity assessment techniques are addressed as well as the effects of physical activity on health. Community-level needs and programs are also analyzed. Offered by Global and Community Health. Limited to three attempts. Equivalent to RHBS 410.

Schedule Type: Lecture

#### Grading

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 411:** Health Program Planning and Evaluation. 3 credits. Addresses planning, implementation and evaluation of highly effective health programs. Emphasis is placed on using evidence-based approaches to program design and evaluation and working productively with communities.Offered by Global and Community Health. Limited to three attempts.

Mason Core: Mason Core, Writing Intensive in Major (https://catalog.gmu.edu/mason-core/)

### **Registration Restrictions:**

**Required Prerequisites:** (GCH  $310^{C}$  or  $310^{XS}$ ) and (GCH  $380^{C}$  or  $380^{XS}$ ) and (ENGH  $302^{C}$  or  $302^{XS}$ ).

<sup>C</sup> Requires minimum grade of C.

### Schedule Type: Lecture

#### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

# GCH 412: Fundamentals of Epidemiology. 3 credits.

Explores epidemiological methods for measuring population health, designing and implementing observational and experimental studies ethically, and applying epidemiological findings to outbreak investigations and public health prevention efforts. Offered by Global and Community Health. Limited to three attempts.

**Recommended Prerequisite:** One of the following: GCH 335, STAT 250, BIOL 214, OM 210, PSYC 300, or SOCI 213.

### **Registration Restrictions:**

Enrollment is limited to students with a major, minor, or concentration in Community Health, Global Health or Public Health.

#### Schedule Type: Lecture

### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 426: Global Emerging Infectious Diseases. 3 credits.

Explores emerging infectious diseases with an emphasis on prevention and control interventions at the local through global levels. Offered by Global and Community Health. Limited to three attempts.

### Schedule Type: Lecture

# Grading:

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 445: Social Determinants of Health. 3 credits.

Examine the social determinants of health and the application of this framework to social work and public health policy and practice interventions. Explore the many social justice factors that affect health and consider which community systems and social change approaches may decrease or eliminate health inequities. Offered by Global and Community Health. Limited to three attempts. Equivalent to SOCW 445. Recommended Prerequisite: 45 credits or permission of the instructor.

# Schedule Type: Lecture

### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 450:** *Culture, Sexuality and the Global AIDS Epidemic.* 3 credits. Examines how the cultural values and mores regarding sexuality shape HIV/AIDS social policy and how these values and mores facilitate and hinder prevention and care efforts. Also examines several sexuality-related topics that interface with culture (e.g., gender, the sex industry, homosexuality) and the effectiveness of prevention and care initiatives

around such issues as condom use, blood donation restrictions, immigration laws, sex education, and HIV testing.Offered by Global and Community Health. Limited to three attempts.

### Schedule Type: Lecture

#### Grading:

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 465: Community Health Capstone. 3 credits.

Analyzes current public health issues, and policies and program used to address these issues. Integrates and applies skills and knowledge learned across the community health curriculum to develop a program that addresses a current public health issue. Develops professional skills necessary for the field of public health. Offered by Global and Community Health. Limited to three attempts.

Mason Core: Mason Core, Mason Apex (https://catalog.gmu.edu/masoncore/)

### **Registration Restrictions:**

**Required Prerequisites:** ((GCH 380<sup>C</sup> or 380<sup>XS</sup>) and (GCH 411<sup>C</sup> or 411<sup>XS</sup>)). <sup>C</sup> Requires minimum grade of C.

XS Requires minimum grade of XS.

### Schedule Type: Lecture

### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 466: Physical Activity in Public Health Capstone. 3 credits.

Analyzes current physical activity and public health issues, policies, and programs used to address these issues. Integrates and applies skills and knowledge learned across the community health curriculum to develop a legislative advocacy plan that addresses a current physical activity and public health issue. Develops professional skills necessary for the field of public health. Offered by Global and Community Health. Limited to three attempts.

Mason Core: Mason Core, Mason Apex (https://catalog.gmu.edu/mason-core/)

# **Registration Restrictions:**

**Required Prerequisites:** ((GCH  $376^{C}$  or  $376^{XS}$ ) and (GCH  $380^{C}$  or  $380^{XS}$ ) and (GCH  $410^{C}$  or  $410^{XS}$ )).

<sup>C</sup> Requires minimum grade of C.

XS Requires minimum grade of XS.

#### Schedule Type: Lecture

### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

# GCH 491: Study Abroad in Public Health. 0-6 credits.

Study abroad under supervision of George Mason University faculty. Course topics, content and locations vary. Offered by Global and Community Health. May be repeated within the degree for a maximum 6 credits.

Specialized Designation: Topic Varies

Schedule Type: Lecture

### Grading:

XS Requires minimum grade of XS.

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This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 494:** Special Topics in Global and Community Health. 3 credits. Selected topics analyzing specialized areas in global and community health. Notes: Content varies. Lecture, seminar, laboratory, workshops.Offered by Global and Community Health. May be repeated within the term for a maximum 12 credits.

Specialized Designation: Topic Varies

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 497: Pre-Internship Seminar. 1 credit.

Prepares students for future professional roles including the GCH 498 internship. The coursework will include resume and cover letter writing, interviewing skills, networking, communications, professionalism, job search strategies, and relationship dynamics in the workplace. Students will select and prepare for a possible GCH internship. Notes: This course must be completed with a grade of B or better in order to be considered for enrollment in GCH 498 Community Health Internship.Offered by Global and Community Health. Limited to three attempts.

**Recommended Prerequisite:** GCH 300 and completion of 60 credit hours, or instructor's permission.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 498: Global and Community Health Internship. 3,6 credits. Provides advanced students with the opportunity to apply community health knowledge while working under the supervision of a community preceptor in a local health organization. Students submit an application to the GCH internship coordinator the semester prior to enrollment for review. Students who have demonstrated academic excellence will receive priority internship placement. Notes: A criminal background check and proof of vaccination status may be required of students prior to beginning an internship. This course provides experiential learning in a community health organization under the direction of a faculty advisor and a preceptor in the community health organization. Students are expected to understand the roles and functions of the community health organization and complete a project approved by the faculty advisor and the preceptor.Offered by Global and Community Health. May be repeated within the degree for a maximum 6 credits.

Recommended Corequisite: GCH 497 with B or better.

Schedule Type: Internship

# Grading:

This course is graded on the Satisfactory/No Credit scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 499:** *Independent Study in Global and Community Health.* 1-6 credits. Provides individual study of a particular problem area in global and community health research, theory development, or education under the direction of faculty.Offered by Global and Community Health. May be repeated within the term for a maximum 6 credits.

Specialized Designation: Topic Varies

Schedule Type: Independent Study

### **Grading:**

This course is graded on the Undergraduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

# **500 Level Courses**

GCH 500: Foundations of Public Health. 3 credits.

Focuses on foundational principles and practices of public health, including historical origins, professional competencies, ethics, core functions and essential services, determinants of health, cultural competence, and communication strategies for diverse populations.Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

### Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 515: Lesbian, Gay, Bisexual, Transgender, and Queer Health. 3 credits. Examines health status and health disparities among lesbian, gay, bisexual, transgender, and queer (LGBTQ) communities across the lifespan. Measurement and methodological considerations in LGBTQ health research, as well as health-related interventions targeting LGBTQ populations will be emphasized. Notes: Offered every other year. Upper level undergraduates interested in taking this course are encouraged to contact the instructor.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 535: Public Health Preparedness and Response. 3 credits.

Examines principles and practices of preparedness for and response to all-hazards, with a focus in the US and select global applications. Provides an overview of roles of public health workers and organizations in emergencies. Discusses significance of collaborating and coordinating with emergency management agencies and other stakeholders. Also reviews at-risk individuals, behavioral health, ethical, and legal issues during public health emergencies.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may **not** enroll.

### Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 543: Global Health. 3 credits.

Examines the major causes of morbidity, mortality, and disability in high, middle, and low income countries and the social, economic, and environmental factors that contribute to the global burden of disease. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

#### Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 551: Rural Public Health. 3 credits.

Introduces and examines determinants of health and health disparities impacting rural communities, including economic factors, cultural and social characteristics, shortages of health professionals, geographic isolation, and legislative and funding challenges. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

# Schedule Type: Lecture

# Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 560: Environmental Health. 3 credits.

Examines principles and methods, risk factors, prevention and control, and policies related to the aspects of human health determined by biological, physical, and chemical factors in the environment at the local, regional, and global levels. Offered by Global and Community Health. May not be repeated for credit.

Specialized Designation: Green Leaf Related Course

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may **not** enroll.

### Schedule Type: Seminar

#### Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 565: Public Health Toxicology. 3 credits.

Focuses on the general mechanisms of toxicity and direct and indirect effects of major environmental and occupational agents. Considers the genetic, physiologic, and psychosocial factors that affect susceptibility to adverse health outcomes associated with environmental or occupational hazard exposure. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 571: HIV/AIDS: Concepts, Principles, and Interventions. 3 credits. Overview of HIV disease, including retrospective and current concepts and analyses, global and societal effect, and cutting-edge research. Examines development of therapeutic tools and skills to educate, reduce risks, control infection, and affect care and healing of client, family, and community, and issues of increasing dilemma for health care professionals.Offered by Global and Community Health. May not be repeated for credit. Equivalent to NURS 571.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

# Schedule Type: Lecture

# Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 591: Study Abroad in Public Health. 3 credits.

Study abroad under supervision of George Mason University faculty. Course topics, content and locations vary. Offered by Global and Community Health. May be repeated within the degree for a maximum 6 credits.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 594:** Special Topics in Global and Community Health. 3 credits. Selected topics analyzing specialized areas in health care. Notes: Content varies. Lecture, seminar, laboratory, and workshops. Offered by Global and Community Health. May be repeated within the degree for a maximum 6 credits. Equivalent to HAP 594.

Specialized Designation: Topic Varies

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

#### Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### 600 Level Courses

GCH 600: Health Promotion Methods. 3 credits.

Fundamental principles and practices of public health promotion and education, including historical origins; professional responsibilities; ethics; health behavior and learning theories; models for planning, implementing and evaluating programs; health literacy; public health advocacy; and the development, selection and implementation of effective instructional materials, methods, and interventions.Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 601: Introduction to Biostatistics. 3 credits.

Applies selected biostatistics techniques to public health and health system management issues. Includes univariate and bivariate statistics, and regression analysis.Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

### Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 604:** Fundamentals of Epidemiology and Biostatistics. 3 credits. Introduces methods for measuring population health and designing epidemiological studies, integrating statistical inference and interpretation of epidemiological data. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

#### Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 607:** Evidence-Based Public Health Practice. 3 credits. Examines strategies for implementing evidence-based approaches in public health practice by applying principles of scientific reasoning and the systematic use of data.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH 604<sup>B</sup>-, 604<sup>XS</sup>, 712<sup>B</sup>- or 712<sup>XS</sup>).

B- Requires minimum grade of B-.

XS Requires minimum grade of XS.

 $\label{lem:condition} Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.$ 

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

#### Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 609:** Community Assessment and Partnerships. 3 credits. Examines strategies for conducting community assessments using community-based participatory approaches to identify factors affecting the health and well-being of population and community health. Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 610: Health Behavior Theory. 3 credits.

Introduces students to the fundamentals of social and behavioral sciences, emphasizing current health behavior theories and models. Students develop an understanding of the theoretical and scientific basis of health promotion/health education interventions and develop community need and asset assessment skills. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

#### Grading

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 611:** Health Program Planning and Evaluation. 3 credits. Addresses the process of program planning, development, and fundamental evaluation principles, emphasizing health promotion programs.Offered by Global and Community Health. May not be repeated for credit.

Mason Core: Mason Core, Writing Intensive in Major (https://catalog.gmu.edu/mason-core/)

### **Registration Restrictions:**

Required Prerequisites: GCH 609<sup>B-</sup> or 609<sup>XS</sup>.

B- Requires minimum grade of B-.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

# Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 618: Environmental and Occupational Risk Assessment. 3 credits. Focuses on how environmental and occupational health risks are identified and quantitatively characterized. Introduces risk communication strategies for technical and non-technical audiences. Introduces students to the development of testable models of chemical exposure. Offered by Global and Community Health. May not be repeated for credit.

Recommended Corequisite: GCH 560.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Seminar

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 620: Public Health Promotion Strategies. 3 credits.

Examines the fundamental principles and practices of public health promotion and education, including historical origins; professional responsibilities, competencies, and ethics; structurally and culturally competent programs; health literacy and communication; public health advocacy; and the design of population specific health promotion materials, methods, and evidence-based interventions. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH 610<sup>B-</sup> and 611<sup>B-</sup>).

B- Requires minimum grade of B-.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Seminar

# Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 626: Migrant Health. 3 credits.

Examines principles and methods for addressing the health concerns of migrant and mobile populations, including immigrants, refugees, asylum seekers, internal migrants, and internally displaced persons. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

# Schedule Type: Lecture

# **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 632: SAS for Health Research. 3 credits.

Introduces students to data management and analysis in the SAS statistical package environment. Guides students through the selection and execution of appropriate analyses for different types of data. Teaches students appropriate written presentation and interpretation of data analysis results. Examples focus on applications to public health research.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

XS Requires minimum grade of XS.

**Required Prerequisites:** (GCH  $601^{B^-}$ ,  $601^{XS}$ ,  $604^{B^-}$ ,  $604^{XS}$ ,  $804^{B^-}$ ,  $804^{XS}$ , HAP  $602^{B^-}$ ,  $602^{XS}$ ,  $719^{B^-}$  or  $719^{XS}$ ).

<sup>B-</sup> Requires minimum grade of B-.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

#### Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 640: Global Infectious Diseases. 3 credits.

Examines ethical approaches for the prevention and control of infectious and parasitic diseases of global importance. Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

#### Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 645: U.S. and Global Public Health Systems. 3 credits.

Examines the organization, financing, and delivery of health services for individuals and populations in the United States and across the globe. Compares international health systems and policies.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

# Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 650: Global Non-Communicable Diseases. 3 credits.

Examines sustainable, evidence-based approaches for the prevention and management of NCDs of global importance. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

**Required Prerequisite:** GCH 543<sup>B-</sup>. Requires minimum grade of B-.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 651: Behavioral Research Methods. 3 credits.

Explores quantitative and qualitative research methods, principles and techniques necessary for implementation of health science research.Offered by Global and Community Health. May not be repeated for credit.

#### Registration Restrictions:

Required Prerequisites: (GCH 604<sup>B-</sup>, 604<sup>XS</sup>, 804<sup>B-</sup> or 804<sup>XS</sup>).

B- Requires minimum grade of B-.

XS Requires minimum grade of XS.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

#### Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 653: Nutritional Epidemiology. 3 credits.

Develops foundational understanding of the relationship of diet and nutrition with health outcomes in populations. Introduces the key concepts, study designs, and methodologies used to investigate associations of nutritional factors with health outcomes. Students will develop critical skills in evaluating and interpreting nutritional epidemiological research. Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

# Schedule Type: Seminar

# **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 655: Public Health Equity and Justice. 3 credits.

Explores the conceptual bases of public health equity and social justice. Critically analyzes the social, ecological, and commercial determinants of health among diverse populations, including policies, systems, and structures that cause and sustain inequities. Investigates evidence-informed strategies to reduce health disparities and promote public health equity and social justice. Offered by Global and Community Health. May not be repeated for credit.

Recommended Prerequisite: GCH 500

### **Registration Restrictions:**

XS Requires minimum grade of XS.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 690: Independent Study. 1-3 credits.

In-depth studies of selected area of health science theory, research, or practice under direction of faculty. Offered by Global and Community Health. May be repeated within the degree for a maximum 6 credits.

**Registration Restrictions:**Enrollment limited to students with a class of A

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Research

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 691: Project Management in Public Health. 3 credits.

Course examines project management roles and environments, the project lifecycle and various techniques of work planning, and control and evaluation to achieve project objectives. Emphasizes leadership, communication, grant writing and ethics. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Enrollment is limited to Graduate, Non-Degree or Undergraduate level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

# 700 Level Courses

**GCH 700:** Social and Ecological Determinants of Health. 3 credits. Examines the evolution and transformation of public health in the United States and globally. Explores the social and ecological determinants of health that are associated with health disparities, and the public health methods that are essential for Public Health 3.0. Analyzes the models, frameworks, methods, and policies that can be used to bridge the research-practice gap in public health.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 712: Introduction to Epidemiology. 3 credits.

Explores epidemiological methods for measuring population health, designing and implementing observational and experimental studies, critically reading the public health literature, and applying research findings to global and community health. Offered by Global and Community Health. May not be repeated for credit.

Recommended Prerequisite: At least one statistics course at any level.

#### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus, Non-Degree or Senior Plus.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 720:** Public Health Problems in a Changing Society. 3 credits. Analyzes current and emerging public health problems impacting diverse populations, emphasizing causes, effects, and prevention. Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

**Required Prerequisites:** ((GCH 607<sup>B-</sup> or 607<sup>XS</sup>) and (GCH 611<sup>B-</sup> or 611<sup>XS</sup>)).

BRequires minimum grade of B-.

XS Requires minimum grade of XS.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

# Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 722: Infectious Disease Epidemiology. 3 credits.

Focuses on the epidemiology of infectious and parasitic diseases. Emphasizes study design and data analysis to support the prevention and control of communicable diseases. Offered by Global and Community Health. May not be repeated for credit.

# Registration Restrictions:

Required Prerequisites: (GCH 712<sup>B-</sup>, 712<sup>XS</sup>, 604<sup>B-</sup> or 604<sup>XS</sup>).

B- Requires minimum grade of B-.

XS Requires minimum grade of XS.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

# **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 726: Advanced Methods in Epidemiology I. 3 credits.

Develops epidemiological skills through critical review of public health literature and synthesis of evidence. Focuses on interpretation and communication of epidemiological methods and biostatistical analyses. Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

Required Prerequisites: GCH 712<sup>B-</sup> or 712<sup>XS</sup>.

B- Requires minimum grade of B-.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 727: Advanced Methods in Epidemiology II. 3 credits.

Focuses on the development of testable research hypotheses that address issues of public health significance, utilizing principles of causal inference. Emphasis on linkage of research hypothesis to appropriate and relevant epidemiologic study designs. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH  $726^{B-}$  or  $726^{XS}$ ) and (GCH  $805^{B-}$  or  $805^{XS}$ ).

B-Requires minimum grade of B-.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may **not** enroll.

Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 728: Meta-Analysis for Population Health Research. 3 credits. Focuses on conceptual understanding of the quantitative methods used to synthesize evidence on population health issues. Methods for pooling evidence across independent studies, pooling binary/continuous outcomes, differences between fixed and random effects models, and guidelines for appraising published systematic reviews/meta-analyses.Offered by Global and Community Health. May not be repeated for credit.

Recommended Prerequisite: GCH 726

# Registration Restrictions:

Required Prerequisites: (GCH  $805^{B}$ -,  $805^{XS}$ , HAP  $719^{B}$ -,  $719^{XS}$ , NURS  $805^{B}$ - or  $805^{XS}$ ).

B- Requires minimum grade of B-.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

#### Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 730: Interventions in Public Health. 3 credits.

Focuses on evidence-based public health intervention programs designed to prevent disease and promote health and well-being. Utilizes a variety of strategies to develop, monitor, evaluate, and disseminate results to appropriate constituents. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 731:** Monitoring and Evaluation of Public Health Interventions. 3 credits.

Examines frameworks, models, and strategies for monitoring and evaluating public health interventions, including policies and programs. Special emphasis on the development of evaluation and communication plans. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

**Required Prerequisite:** GCH 730<sup>B</sup>. Requires minimum grade of B.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 732: Chronic Disease Epidemiology. 3 credits.

Focuses on the epidemiology of chronic diseases, including cancers, cardiovascular and lung diseases, and mental health disorders. Emphasizes study design, critical reading, and public health approaches to disease control, such as surveillance and screening. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH 712<sup>B</sup>-, 712<sup>XS</sup>, 604<sup>B</sup>- or 604<sup>XS</sup>).

B- Requires minimum grade of B-.

XS Requires minimum grade of XS.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

XS Requires minimum grade of XS.

XS Requires minimum grade of XS.

XS Requires minimum grade of XS.

### GCH 742: Behavioral Epidemiology. 3 credits.

Focuses on applying epidemiological principles to the study of behavior and human health, emphasizing the role of behavior in public health, determinants of behavior, and research methods for studying health and disease in relation to behavior. Notes: Offered every other year. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH 712<sup>B-</sup>, 712<sup>XS</sup>, 604<sup>B-</sup> or 604<sup>XS</sup>).

<sup>B-</sup> Requires minimum grade of B-.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

### GCH 762: Environmental Epidemiology. 3 credits.

Focuses on applying epidemiological principles to the study of the environment exposures and human health, emphasizing research methods and data analysis, critical review of research, communication of research results, and applications to public health.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH 712<sup>B-</sup>, 712<sup>XS</sup>, 604<sup>B-</sup> or 604<sup>XS</sup>).

B- Requires minimum grade of B-.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Seminar

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

# GCH 772: Social Epidemiology. 3 credits.

Focuses on applying epidemiological principles to the study of social factors and human health. Prepares students to measure population-level social determinants of health and quantitatively evaluate their relationship with health and disease. Requires students to translate information and analyses into summaries suitable for technical and non-technical audiences. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH 712<sup>B-</sup>, 712<sup>XS</sup>, 604<sup>B-</sup> or 604<sup>XS</sup>).

<sup>B-</sup> Requires minimum grade of B-.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 780: Practicum Seminar. 0 credits.

Provides students with guidance and preparation for engaging in the public health practicum. Must be completed one semester prior to enrollment in GCH 790 Practicum in Public Health.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Seminar

#### Grading:

This course is graded on the Graduate Special scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 782:** International Research Ethics and Methods. 3 credits. Prepares students to conduct global and community health research. Discusses ethical issues in international health research. Develops plans for identifying a research project, collecting and analyzing data, and reporting results of international health research.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: ((GCH 543<sup>B-</sup> or 543<sup>XS</sup>) and (GCH 604<sup>B-</sup> or 604<sup>XS</sup>)).

<sup>B-</sup> Requires minimum grade of B-.

XS Requires minimum grade of XS.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

### Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

# GCH 790: Practicum in Public Health. 3 credits.

Provides students with an in-depth supervised experience in an approved public health organization. Requires students to complete a project related to an actual public health issue that is a focus within the organization. Offered by Global and Community Health. May not be repeated for credit.

**Recommended Prerequisite:** Students must be enrolled in the MPH program in good standing and have completed 21 credit hours in the MPH program.

### **Registration Restrictions:**

Required Prerequisites: (GCH 780, 780 XS or 780 XP).

XS Requires minimum grade of XS.

XP Requires minimum grade of XP.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Internship

### Grading:

This course is graded on the Graduate Special scale. (https://catalog.gmu.edu/policies/academic/grading/)

# GCH 792: Integrative Learning Experience. 0 credits.

Provides an integrative learning experience to demonstrate synthesis of the Master of Public Health foundational and concentration competencies. Students produce a written product appropriate to

XS Requires minimum grade of XS.

XS Requires minimum grade of XS.

XS Requires minimum grade of XS.

educational and professional objectives. Taken in conjunction with GCH 790 and is part of the MPH practicum requirement. Offered by Global and Community Health. May not be repeated for credit.

**Recommended Prerequisite:** Must be enrolled in the MPH program in good standing and have completed at least 21 credit hours in the degree program.

**Recommended Corequisite: GCH 790** 

**Registration Restrictions:** 

Required Prerequisites: (GCH 780<sup>C</sup>, 780<sup>XS</sup> or 780<sup>XP</sup>).

<sup>C</sup> Requires minimum grade of C.

XS Requires minimum grade of XS.

XP Requires minimum grade of XP.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

#### Grading

This course is graded on the Satisfactory/No Credit scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 794: Global Health Research Capstone. 3 credits.

Provides a supervised, collaborative research experience on a global health topic that allows students to synthesize, integrate, and apply the knowledge and skills acquired in coursework. Offered by Global and Community Health. May not be repeated for credit.

**Registration Restrictions:** 

Required Prerequisites: (GCH 651<sup>B-</sup> or 651<sup>XS</sup>).

B- Requires minimum grade of B-.

XS Requires minimum grade of XS.

Enrollment limited to students in the PH-MS-GLOH program.

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

#### **Grading:**

This course is graded on the Graduate Special scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 795:** Advanced Special Topics in Global and Community Health. 1-3 credits.

Advanced special topics course to address in-depth study of contemporary areas of global and community health insufficiently covered in other courses. Notes: Fulfills elective requirement for MS in global health degree and global health certificate program. Topics vary. May take up to 6 credits within their degree program.Offered by Global and Community Health. May be repeated within the term for a maximum 6 credits.

Specialized Designation: Topic Varies

**Recommended Prerequisite:** Must be enrolled in a graduate program and have permission of the instructor.

### **Registration Restrictions:**

Enrollment is limited to Graduate or Non-Degree level students.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Seminar

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 799: Thesis Research. 1-6 credits.

Thesis research and writing. Offered by Global and Community Health. May be repeated within the degree for a maximum 6 credits.

Recommended Prerequisite: Completion of 30 hours in the Master of

Science program.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy or Graduate

Schedule Type: Thesis

### **Grading:**

This course is graded on the Satisfactory/No Credit scale. (https://catalog.gmu.edu/policies/academic/grading/)

### **800 Level Courses**

GCH 800: Advanced Heath Equity. 3 credits.

Provides deepened understanding of theories and strategies for health equity. Familiarizes students with the intersection of social justice and public health, and the role of research and theory in shaping research questions, interpretations of disease distribution, and interventions. Equips students with the essential skills and knowledge to develop theory-informed research questions, identify and understand socially patterned health inequities within populations, confront historical and modern-day injustices, and tackle relevant issues shaping the public health field today by delving into social justice principles, problems, and solutions.Offered by Global and Community Health. May not be repeated for credit.

Recommended Corequisite: GCH 700

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Enrollment is limited to students with a major in Public Health.

Enrollment limited to students in a Doctor of Philosophy degree.

Schedule Type: Seminar

#### Grading:

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 804: Biostatistics for Public Health I. 3 credits.

Examines principles and methods of biostatistical data analysis and inference, including hypothesis testing, confidence intervals, measures of association, and regression. Using public health data, students apply statistical methods and interpret output from a statistical computing package. Offered by Global and Community Health. May not be repeated for credit.

Recommended Prerequisite: A graduate-level statistics course.

### Registration Restrictions:

Enrollment is limited to Graduate level students.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 805: Biostatistics for Public Health II. 3 credits.

Applies data analysis techniques for data management, data cleaning, exploratory data analysis, and statistical modeling to public health data using a statistical computing package. Introduces advanced statistical analysis methods such as multivariable regression models, longitudinal data analysis, and survival analysis. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: GCH 804<sup>B-</sup> or 804<sup>XS</sup>.

B- Requires minimum grade of B-.

XS Requires minimum grade of XS.

Enrollment is limited to Graduate level students.

Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 806:** Advanced Multivariate Statistics and Data Analysis for Health Care Research. 3 credits.

Examines canonical correlation, discriminant analysis, factor analysis and causal analysis (path models and structural equation modeling). Students analyze and interpret data using these statistical techniques. Offered by Global and Community Health. May not be repeated for credit. Equivalent to NURS 806.

**Recommended Prerequisite:** GCH 805 or NURS 805, or equivalent multivariate statistics course.

### **Registration Restrictions:**

Enrollment is limited to Graduate level students.

Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 807: Measurement in Nursing and Public Health Research. 3 credits. Synthesize measurement theories and principles as a foundation for the development and evaluation of instruments for use in public health and healthcare research. The course includes review of statistical techniques required for understanding measurement theory, reliability, validity, responsiveness, item analysis, and instrument construction. Students design, construct, administer, analyze, and evaluate an original instrument and evaluate an existing instrument in healthcare research.Offered by Global and Community Health. May not be repeated for credit.

Recommended Prerequisite: NURS 804 or GCH 805 or permission of instructor.

#### **Registration Restrictions:**

Enrollment is limited to Graduate level students.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Special scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 810: Advanced Health Behavior Theory. 3 credits.

Offers an in-depth exploration of the key social and behavioral science theories, models, and frameworks that are widely applied in the field of public health. Students will explore the history and the development of foundational and contemporary concepts that explain why individuals and populations engage in certain health-related behaviors and how these behaviors impact health outcomes. Through the study of these theories, models, and frameworks students will also learn how to effectively design, implement, and evaluate interventions and policies aimed at addressing some of today's most pressing public health challenges, such as chronic diseases, infectious diseases, and health disparities. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: GCH 700<sup>B-</sup> and 800<sup>B-</sup>.

B- Requires minimum grade of B-.

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 814: Biostatistics for Public Health III. 3 credits.

Examines statistical techniques for the analysis of longitudinal, multilevel, survival, and other epidemiologic data. For epidemiologic research hypotheses, students will select appropriate state-of-the-art statistical methods, utilize statistical computing software to evaluate results, and communicate scientific findings.Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH 805<sup>B-</sup> or 805<sup>XS</sup>).

B- Requires minimum grade of B-.
XS Requires minimum grade of XS.

Enrollment limited to students with a class of Advanced to Candidacy, Graduate or Non-Degree.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 824:** Advanced Data Analysis for Epidemiologic Research. 3 credits. Emphasizes theory and practice of advanced computational methods for controlling for confounding, evaluating effect modification, and approaches for addressing missing data, using multivariable and other models in the context of major epidemiological study designs.Offered by Global and Community Health. May not be repeated for credit.

# **Registration Restrictions:**

Required Prerequisites: (GCH 726<sup>B-</sup> and 805<sup>B-</sup>).

B- Requires minimum grade of B-.

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

#### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 826: Design of Epidemiologic Research. 3 credits.

Focuses on the application of strategies for addressing key methodologic challenges that arise when carrying out epidemiologic research and incorporates experiential learning components. Offered by Global and Community Health. May not be repeated for credit.

### **Registration Restrictions:**

Required Prerequisites: (GCH 726<sup>B</sup> and 805<sup>B</sup>).

B Requires minimum grade of B.

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 830: Research Grant Writing for Public Health. 3 credits.

Examines universal principles and concepts of writing effective research grant applications for public health with the emphasis on submitting proposals to agencies that support public health research. Offered by Global and Community Health. May not be repeated for credit.

Recommended Prerequisite: GCH 726 and GCH 805/NURS 805/HAP 719

# Registration Restrictions:

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may **not** enroll.

### Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 851:** Advanced Research Designs and Analysis for Social and Behavioral Health Sciences. 3 credits.

Examines and analyzes data from group-randomized and controlled quasi-experimental trials, including longitudinal and time-series experiments in social and behavioral public health research.Offered by Global and Community Health. May not be repeated for credit.

# Registration Restrictions:

Required Prerequisites: GCH 804<sup>B</sup> and 651<sup>B</sup>.

B Requires minimum grade of B.

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

# Schedule Type: Lecture

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 880: Epidemiologic Research Seminar. 3 credits.

Facilitates the development of students' dissertation research through an emphasis on critical review of the epidemiologic research literature. Includes integrative discussions of contemporary challenges in epidemiology.Offered by Global and Community Health. May not be repeated for credit.

#### **Registration Restrictions:**

Required Prerequisites: GCH 727\*B and 814\*B.

\* May be taken concurrently.

<sup>B</sup> Requires minimum grade of B.

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

#### Schedule Type: Seminar

### **Grading:**

This course is graded on the Graduate Regular scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 890: Doctoral Seminar. 0-3 credits.

Explores contemporary issues and innovations in public health research and population health. Focuses on the responsible conduct of research. Emphasizes professional development activities, such as scientific communication skills, preparing for the job market, and career planning. Offered by Global and Community Health. May be repeated within the degree for a maximum 3 credits.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

### Schedule Type: Seminar

# **Grading:**

This course is graded on the Satisfactory/No Credit scale. (https://catalog.gmu.edu/policies/academic/grading/)

**GCH 894:** *Doctoral Student Internship in Public Health.* 1-3 credits. Provides students with an in-depth supervised experience in an approved public health organization. Offered by Global and Community Health. May be repeated within the degree for a maximum 6 credits.

**Recommended Prerequisite:** Students must be enrolled in the PhD program in good standing and have completed 21 credit hours in the PhD program.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

# Schedule Type: Internship

### **Grading:**

This course is graded on the Satisfactory/No Credit scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 897: Directed Readings and Research. 1-3 credits.

Provides in-depth studies of advanced topics in public health science theory and research under the direction of faculty. Offered by Global and Community Health. May be repeated within the degree for a maximum 6 credits.

# **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Schedule Type: Independent Study

### **Grading:**

This course is graded on the Satisfactory/No Credit scale. (https://catalog.gmu.edu/policies/academic/grading/)

# 900 Level Courses

GCH 998: Doctoral Dissertation Proposal. 1-9 credits.

Focuses on the development of a doctoral dissertation proposal in their area of concentration under the direction of their dissertation committee. Includes the development of research hypotheses, literature review, study methods, data analysis, and detailed publication strategy. Offered by Global and Community Health. May be repeated within the degree for a maximum 12 credits.

### **Registration Restrictions:**

Enrollment limited to students with a class of Advanced to Candidacy or Graduate.

Students in a Non-Degree Undergraduate degree may not enroll.

Schedule Type: Dissertation

#### **Grading:**

This course is graded on the Satisfactory/No Credit scale. (https://catalog.gmu.edu/policies/academic/grading/)

GCH 999: Doctoral Dissertation. 1-9 credits.

Doctoral dissertation research and defense under the direction of their dissertation committee. Offered by Global and Community Health. May be repeated within the degree for a maximum 18 credits.

Registration Restrictions: Required Prerequisite: GCH 998.

Enrollment limited to students with a class of Advanced to Candidacy.

Schedule Type: Dissertation

# Grading:

This course is graded on the Satisfactory/No Credit scale. (https://catalog.gmu.edu/policies/academic/grading/)