Course Descriptions

Below is a list of some of the courses within the NDSU Master of Public Health program.

MPH

MPH 700, Preventing and Managing Chronic Illness
3 credits
This course will explore the effects of chronic health issues on individuals, families, and lay caregivers from a pharmacy and public health care perspective. Psychosocial, cultural, behavioral, and health care system factors influencing chronic health issues will be examined as well as the role pharmacists can play. MPH students only.

MPH 704, Leading and Managing Public Health Systems
3 credits
A pragmatic study of the issues, constituents, processes, and tools of public health leadership and management. This course is restricted to MPH majors or MPH certificate participants only.

MPH 705, Global Health
3 credits
This course will survey the health of populations globally and introduce strategies, programs and health systems designed to improve the health of those populations. Prereq: Admission to MPH program.

MPH 710, Healthcare Delivery in the United States
3 credits
Introduction to health professions, health care delivery systems, financing, health promotion, and behavioral issues. This course is restricted to MPH majors or MPH certificate participants only.

MPH 712, Health Outcomes Research
This course provides MPH students enrolled in the public health in clinical systems track with the skills and tools necessary to assess studies and conduct basic assessment in a variety of health care settings.

Admission into the MPH program. Successful completion of the MPH courses in statistics and epidemiology.

MPH 720, Environmental Health
3 credits
Analysis of key concepts, principles, and applications of the primary natural and social science disciplines that underpin the core of environmental health.

This course is restricted to MPH majors or MPH certificate participants only.
MPH 731, Biostatistics
3 credits
This core course introduces the selection, use and interpretation of basic statistical tests and concepts that may be used in addressing, analyzing and solving problems in public health, biomedical and health care research.
This course is restricted to MPH majors or MPH certificate participants only.

MPH 735, Principles of Infectious Disease Management I
3 credits
The course is the first part of a two-part series that will provide a foundational overview of the major infectious diseases that have a significant impact on public health.
This course is restricted to MPH majors or MPH certificate participants only.

MPH 736, Principles of Infectious Disease Management II
3 credits
The course will build on MPH 735, Principles of Infectious Disease Management I and focus on the epidemiology, clinical presentation, treatment, and control of the major communicable diseases. Prereq: MPH 735.
This course is restricted to MPH majors or MPH certificate participants only.

MPH 741, Social and Behavioral Sciences in Public Health
3 credits
Foundation knowledge and competencies in applying social and behavioral sciences theories and methods to public health problems.
This course is restricted to MPH majors or MPH certificate participants only.

MPH 751, Essentials in Epidemiology
3 credits
Emphasis on application of the principles of epidemiology as applied to the investigation and prevention of individual and population health problems.
This course is restricted to MPH majors or MPH certificate participants only.

MPH 755, Integrating Primary Care and Public Health (Pending University Approval)
3 credits
This course explores the intersections of public health and primary care and their roles in addressing personal and population health issues.

MPH 765, Cultural Competence in Health Professions
3 credits
The purpose of this course is to provide education and skill building that will enable students to effectively utilize cultural and linguistic competence as a key tool to improve health outcomes and understanding of communication for diverse populations.
**MPH 771, American Indian Health Policy**

3 credits

The course will provide a detailed overview of the unique policy issues that form the legal basis for provision of public health and healthcare services to American Indians and Alaska Natives. Prereq: Admission to the MPH program.

This course is restricted to MPH majors or MPH certificate participants only.

**MPH 772, American Indian Health Disparities**

3 credits

The course will provide a detailed overview of the basis for and regional differences in American Health Disparities. Strategies to reduce disparities will be highlighted. Prereq: Admission to the MPH program.

This course is restricted to MPH majors or MPH certificate participants only.

**MPH 773, Cultural Competence in Indian Health**

3 credits

The course will provide a detailed overview of numerous American Health Cultures in the United States and Canada. Cultural aspects of health and strategies to develop culturally appropriate health programs will be highlighted. Prereq: Admission to MPH program.

This course is restricted to MPH majors or MPH certificate participants only.

**MPH 774, Research Issues in Tribal Communities**

3 credits

This course will provide a detailed overview of the numerous unique considerations for conducting health-related research in tribal communities. These issues include tribal sovereignty, tribal approval processes, historical distrust of research, and cultural factors. Prereq: Admission to MPH program.

This course is restricted to MPH majors or MPH certificate participants only.

**MPH 775, Case Studies in Indian Health**

3 credits

This course will provide an overview of several case studies in American Indian and Alaska Native Health that have been successfully implemented. The cases will be examined to determine what worked, why it worked, and challenges in developing successful programs. Prereq: Admission to the MPH program.

This course is restricted to MPH majors or MPH certificate participants only.

**EMGT**

**EMGT 614, Spatial Analysis in Emergency Management**

3 credits

This course is designed to provide emergency management students with specific disaster related applications of spatial analysis techniques in state of the art GIS software. {Also offered for undergraduate credit - see EMGT 414.}

**EMGT 620, Hazard, Risk, and Vulnerability Assessments**

3 credits

Educates students in the preparation of hazard, risk, and vulnerability assessments. Prereq: EMGT 614. {Also offered for undergraduate credit - see EMGT 420.}
ENGL

ENGL 751, Tools for Academic Writing - Clarity and Style
1 credit
Eight-week course: This course’s goal is to help students to write clear, correct, and audience-appropriate academic documents. Students will learn and implement specific writing strategies to meet this goal. In addition, they will investigate writing expectations and analyze academic writing in their own discipline. Grading: satisfactory/unsatisfactory.

ENGL 752, Tools for Academic Writing: Writing Your Manuscript
1 credit
Semester-long intensive academic writing with extensive individualized feedback. Students develop a writing plan, obtain approval from their advisors, and write intensively, receiving regular individualized assistance from a graduate writing consultant. S/U grading.

HNES

HNES 652, Nutrition, Health and Aging
3 credits
Physiological changes with aging and their relationship to food habits and nutritional need. Common nutritional health problems with emphasis on prevention and treatment. 3 lectures. {Also offered for undergraduate credit - see HNES 452.}

HNES 724, Nutrition Education
3 credits
Principles and practices of teaching individuals and groups to translate nutrition knowledge into action. Emphasis on research in evaluation of nutrition education.

HNES 725, Promoting Health through Policy, System and Environment
3 credits
This course will focus on health promotion at community, state, and national levels through policy, system, and environmental (PSE) changes by examining laws, system changes, changes to economic, social, or physical environments.

HNES 727, Physical Activity Epidemiology
3 credits
Review of the evidence on the associations between physical activity and chronic diseases, and effects of physical activity on health. Understanding and discussion regarding how the methods of epidemiology are being used to scientifically confirm that physical inactivity is a burden on public health and what can be done about it.

HNES 745, Community Health Leadership
3 credits
This course will focus on developing leadership and collaboration skills required by public health leaders to work with community leaders and organizations.

**HNES 777, Scholarly Writing and Presenting in HNES**
3 credits
This course is designed for students pursuing their Master or Doctorate degree who are currently writing a proposal or a chapter of their thesis or dissertation. Class sessions cover the conventions for each chapter of the thesis/dissertation, analytical reading of research articles in the areas of HNES, and effective methods of presenting research.

**MICR**

**MICR 663, Clinical Parasitology**
2 credits
A study of protozoan and helminthic parasites of humans, with an emphasis on clinical identification, life histories, and control. {Also offered for undergraduate credit - see MICR 463.}

**MICR 675, Animal Virology**
3 credits
The biology of animal viruses with emphasis on virus replication and pathogenesis. {Also offered for undergraduate credit - see MICR 475.}

**MICR 750, Advanced Topics in Epidemiology**
3 credits

**MICR 752, Advanced Food Microbiology**
3 credits
Molecular methods for detection and subtyping of foodborne pathogens and spoilage organisms.

**MICR 756, Advanced Topics in Public Health Microbiology**
3 credits
Through the use of case-based learning, students explore several key areas of public health microbiology. Case questions encourage students to think about disease prevention, management and eradication. Students will be expected to read and research information on each case and answer discussion questions.

**MICR 781, Advanced Bacterial Physiology**
3 credits
In-depth consideration of various topics in bacterial physiology such as autotrophy, bacterial growth and growth yields, energy-yielding metabolism, and regulation of catabolic pathways. Prereq: MICR 680.
NURS

NURS 715, Advanced Community Assessment

3 credits

Epidemiologic techniques, reporting, and research will be presented. Emphasis is placed on disease prevention and control. Health problems of national and international significance will be examined and strategies for solutions and/or management will be proposed. Prereq: an inferential statistics course.

PHRM

PHRM 685, Economic Outcomes Assessment/Relevant Issues

2 credits

The use of pharmacoeconomic analysis and outcomes assessment as applied to health care. Prereq: PHRM 480 or Doctor of Nursing or MBA standing.