

Public Health (PH)

Courses

PH 101. Introduction to Public Health. 3 Credits.

This course introduces undergraduate students to the interdisciplinary and exciting field of public health. Discussing and studying the processes and practices of public health enhances the population health perspective of healthcare and other professionals.

PH 190. Critical Thinking, Academic, and Professional Skills for the Health Professions. 3 Credits.

This course provides students with opportunities to develop proficient critical thinking and clinical problem-solving skills as they are used in the health professions. This course will also immerse students in reasoning-related activities that facilitate academic success, teamwork, and a demonstrated commitment to the roles and responsibilities required of all health professionals. Cross-listed with ASCI 190 and PHRM 190.

PH 300. Introduction to the U.S. Health Care System. 3 Credits.

This course introduces students to the structure, design and groups who participate in the U.S. healthcare system. Emphasis will be placed on describing the roles of various health professions, organizations and/or settings in which health care is provided, and the mechanisms by which health care is financed. Students will gain an understanding of how these components frame major issues of health policy and public health that include, ensuring access to services, ensuring high quality care, and ensuring that care is provided efficiently. This course will also immerse students in reasoning-related activities that facilitate teamwork and a commitment to the roles and responsibilities required of all health professionals. Prereq or Coreq: Junior or senior standing.

PH 301. Research Methods in Health Services. 3 Credits.

This course introduces students to tools and techniques used in health-related research and evidence-based medicine. Students will also develop skills and confidence necessary to read, synthesize, and evaluate the health services literature. Prereq: STAT 330 with a grade of C or higher. Prereq or Coreq: Junior or senior standing.

PH 379. Global Seminar. 1-6 Credits.

NDSU instructed experience or field study in a foreign country. Conducted in English for residence credit. Pre-requisite: Prior approval by International Student and Study Abroad Services and major department. May be repeated. Standard Grading.

PH 452. Lifestyle Approaches to Prevention, Treatment, and Reversal of Disease. 3 Credits.

Explore Lifestyle Medicine and apply the science of lifestyle behaviors in the prevention, treatment, and reversal of disease. Prereq: BIOL 221, 221L. {Also offered for graduate credit - See PH 652.}.

PH 474. Epidemiology. 3 Credits.

Study of the distribution and dynamics of disease in populations. Presents principles and methods of epidemiologic investigation with a focus on infectious diseases. Prereq: PH 101. Dual-listing: PH 674.

PH 475. One Health. 2 Credits.

This course focuses on One Health concepts, emphasizing the interconnectivity between human, animal and environmental health. Prereq: Senior standing. Cross-listed with ANSC 475. Dual-listing: ANSC 675 and PH 675.

PH 477. Vaccinology. 3 Credits.

Vaccinology introduces the basic biological principles governing vaccinology, emphasizing vaccine development and testing, immunity, manufacture, and clinical aspects in veterinary and human medicine. Prereq: MICR 350. Cross-listed with MICR 477. Dual-listing: MICR 677 and PH 677.

PH 479. Global Seminar. 1-6 Credits.

NDSU instructed experience or field study in a foreign country. Conducted in English for residence credit. Pre-requisite: Prior approval by International Student and Study Abroad Services and major department. May be repeated. Standard Grading.

PH 489. Health Services Capstone. 1 Credit.

The purpose of this course is to provide an opportunity for students to reflect upon their experiences in the Bachelor of Science in Health Services program, and use that opportunity for reflection to develop a comprehensive plan that integrates coursework taken throughout the program and posits a clear career trajectory based on that plan. Prereq or Coreq: Health Services major in their final semester of study.

PH 491. Seminar. 1-5 Credits.

PH 494. Individual Study. 1-5 Credits.

PH 496. Field Experience. 1-15 Credits.

PH 652. Lifestyle Approaches to Prevention, Treatment, and Reversal of Disease. 3 Credits.

Explore Lifestyle Medicine and apply the science of lifestyle behaviors in the prevention, treatment, and reversal of disease. Prereq: matriculated into the MPH program or public health certificate. {Also offered for undergraduate credit - See PH 452.}.

PH 674. Epidemiology. 3 Credits.

Study of the distribution and dynamics of disease in populations. {Also offered for undergraduate credit - see PH 474.}.

PH 675. One Health. 2 Credits.

This course focuses on One Health concepts, emphasizing the interconnectivity between human, animal and environmental health. Cross-listed with ANSC 675. Dual-listing: ANSC 475 and PH 475.

PH 677. Vaccinology. 3 Credits.

Vaccinology introduces the basic biological principles governing vaccinology, emphasizing vaccine development and testing, immunity, manufacture, and clinical aspects in veterinary and human medicine. Cross-listed with MICR 677. Dual-listing: PH 477.

PH 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 public health and clinical systems perspective. PH students only.

PH 704. Public Health Management and Policy. 3 Credits.

The course will provide a pragmatic overview of the issues, constituents, processes, and tools of public health management and policy.

PH 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 PH program.

PH 706. Essentials of Epidemiology. 3 Credits.

Emphasis on application of the principles of epidemiology as applied to the investigation and prevention of individual and population health problems.

PH 711. Integrating Primary Care and Public Health. 3 Credits.

The course examines the role of primary care and public health in addressing personal and population health issues with particular attention to community health needs assessment, social determinants of health, health inequities, cultural competence, and community involvement to address contemporary challenges to the health of U.S. populations.

PH 712. Public Health Research Methods. 3 Credits.

This course provides an introduction to a variety of research methods and key components of a research study that can be employed in public health research and practice.

PH 720. Environmental Health. 2 Credits.

Analysis of key concepts, principles, and applications of the primary natural and social science disciplines that underpin the core of environmental health.

PH 722. Applied Community Health. 3 Credits.

This course is designed to provide students with knowledge and skills needed to address public health issues within community settings. Prereq: Public Health students only.

PH 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 environment (PSE) strategies through readings, films, writing, and discussion.

PH 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.

PH 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.

PH 736. Principles of Infectious Disease Management II. 3 Credits.

The course will build on PH 735, Principles of Infectious Disease Management I and focus on the epidemiology, clinical presentation, treatment, and control of the major communicable diseases. Prereq: PH 735.

PH 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.

PH 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.

PH 750. Epidemiologic Methods I. 2 Credits.

This course covers the development of an observational epidemiologic study and the use and interpretation of methods and techniques for analyzing observational epidemiologic data. Prereq: PH 706, PH 712.

PH 752. Epidemiologic Methods II. 2 Credits.

Distribution and dynamics of disease in populations and methods for detecting and interpreting spatial patterns of disease.

PH 753. Public Health Surveillance. 2 Credits.

This course provides an introduction to public health surveillance and key characteristics of a variety of surveillance systems that can be utilized in all fields of public health practice. Lectures from experts in the field will provide real world examples and opportunities for students to interact with public health professionals.

PH 754. Health Survey Research. 2 Credits.

This course will familiarize students with the use of survey research methods. The course will cover practical issues in survey methods, with a focus on instrument development, mode of data collection, sampling, and minimizing survey error. The course will include hands-on development of a survey instrument, a cover letter, and a sampling plan.

PH 761. Injury Prevention. 1 Credit.

This course is intended to introduce students to the basic tenets of injury prevention. Additionally, the course will expose students to the epidemiology of numerous types of injury, and to public health methods to controlling and/or eliminating injuries.

PH 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. PH students only.

PH 772. American Indian Health Equity. 3 Credits.

To provide a detailed overview of the basis for and regional differences in American Indian health inequity and disparities as well as strategies to reduce these in culturally appropriate ways. Prereq: Admission to the PH program.

PH 774. Research and Evaluation in Tribal Communities. 3 Credits.

The course will provide a detailed overview of the unique considerations for conducting health-related research and evaluation in Indigenous communities. Considerations include centering Indigenous ways of knowing and methodologies, creating community-driven research agendas, sovereignty, distrust of research and evaluation based on historical and contemporary abuses, effective partnerships with non-Indigenous allies, and strengths and limitations of datasets for addressing health disparities. Prereq: Admission to PH program.

PH 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 PH program.

PH 781. Foundations of Maternal and Child Health. 3 Credits.

Historical and theoretical foundations of maternal and child health (MCH) as well as policies and programs aimed to reduce morbidity, mortality, and health disparities in MCH populations will be covered.

PH 782. Introduction to Maternal and Child Health Epidemiology. 2 Credits.

This course provides an introduction to maternal and child health epidemiology and key metrics to describe the local, national and global status of the maternal and child health population. Requires admission to the MPH or PH certificate programs.

PH 785. Women's Health. 2 Credits.

This course will explore historical, social, behavioral, cultural, and environmental issues that impact women's health, as well as medical and public health interventions and programming that promote women's health.

PH 789. Integrative Learning Experience. 1 Credit.

Students must complete an integrative learning experience (ILE) that demonstrates synthesis of foundational and concentration competencies selected based on student's educational and professional goals. Must have department permission to register.

PH 790. Graduate Seminar. 1-5 Credits.**PH 793. Individual Study. 1-5 Credits.****PH 794. Practicum. 1-8 Credits.****PH 795. Field Experience. 1-15 Credits.****PH 797. Master's Paper. 1-3 Credits.****PH 798. Master's Thesis. 1-10 Credits.****PH 898. Continuing Enrollment. 1-9 Credits.**

For graduate students who have completed all necessary credits of course work including thesis (798) and dissertation (899) on their approved Plan of Study, but who have not yet completed and submitted their thesis or dissertation. This course does not count towards the credit requirements for the degree and is not financial aid eligible. Department consent required to enroll.

PH 899. Doctoral Dissertation. 1-15 Credits.