

# PUBLIC HEALTH (PH)

## PH 510 Statistics for Public Health

4 Class Hours, 4 Quarter Credit Hours

An introduction to statistical principles and applications to problems in clinical and public health settings, including data presentation, types of variables, descriptive statistics, introduction to probability, elements of hypothesis testing, and one- and two-sample tests, and regression, including linear, logistic, multinomial logistic and ordinal logistic.

## PH 516 Fundamentals of Public Health

4 Class Hours, 4 Quarter Credit Hours

This course will give students an overall understanding of the history, goals and issues in public health. The course will cover in detail the core functions and essential services of public health, as it relates to current national efforts such as public health accreditation, quality improvement, and emergency preparedness.

## PH 520 Epidemiology

4 Class Hours, 4 Quarter Credit Hours

Prerequisites: PH 510 or NUR 520

An introduction to the epidemiological perspective on health and disease, with emphasis on the principles and methods used to describe and evaluate the patterns of illness in populations and applications to public health research, policy and practice. Topics include the current applications of epidemiology, measures of disease occurrence and comparison in varying populations, observational and experimental study designs, causation and interference, common sources of error and their control, disease surveillance and screening, and infectious disease epidemiology.

## PH 530 Research/Methods

4 Class Hours, 4 Quarter Credit Hours

Students will learn about major methodologies useful in public health research. Topics include philosophy of scientific investigation, field research, survey research, experimental design, construction of questionnaires, attitudes scales and the format for writing a research prospectus.

## PH 535 Social Marketing and Communications

4 Class Hours, 4 Quarter Credit Hours

Students will learn to use the social marketing process and communication theories to create, communicate, and deliver value that ultimately influences target audience behaviors in a culturally appropriate and persuasive way. Students will also apply marketing principles and techniques, guiding behavior change theories, research and a planning process to then create and communicate public health programs to diverse audiences in writing and in presentations.

## PH 545 Environmental Health

4 Class Hours, 4 Quarter Credit Hours

This course will discuss environmental risks and pollutants that affect human health and will review data used to evaluate the effectiveness of prevention and control strategies. Topics will include water, wastewater, solid wastes, food sanitation, vector control, housing, chemical exposures, lead and other poisonings, and basic occupational health risks.

## PH 550 Public Health Policy and Planning

4 Class Hours, 4 Quarter Credit Hours

This course will introduce students to the basics of public health policy, including population health and health disparities. We will explore policy advocacy through community organizing – which is empowering stakeholders to take action to create change in their communities. Students will learn about the theory and practice of policy changes that improve public health at the state and local levels.

## PH 551 Health Equity and Ethics

4 Class Hours, 4 Quarter Credit Hours

This course is a study of the policy making process that considers social, ethical and legal aspects of public health. It reviews the sources of law, legal protections of fundamental rights, government police powers, social welfare and entitlements programs. Students will apply the public health ethical framework and will discuss and analyze policy implementation and evaluation.

## PH 552 Program Funding and Evaluation

4 Class Hours, 4 Quarter Credit Hours

In this course, students use public health program information to develop a culturally competent evaluation plan along with a logic model, and negotiated budget. An example of a CDC grant will be used to familiarize students with the requirements and components of a grant budget, while cementing the understanding of a logic model in the formulation of evaluation.

## PH 560 Public Health Evaluation

4 Class Hours, 4 Quarter Credit Hours

Students will review the value and use of different evaluation methods to balance the rigor and limitations of public health practice and use this information to design and/or improve public health in diverse populations. Students will use basic research methods to design and conduct small-scale evaluations to assess impact on public health and health equity.

## PH 561 Equity Practicum

12 Lab Hours, 4 Quarter Credit Hours

Prerequisites: PH 510 and PH 571 and PH 516 and PH 581 and PH 520 and PH 530 and PH 535 and PH 551 and MGM 514 and PH 552

NOTE: Prior to registering for this course, students must have approval for the Portfolio and the Capstone proposals and have a plan to complete the 3 Portfolio products. In this student-driven course, students declare the 4 competencies of their choice (3 foundational and 1 generalist) and will spend about 50 hours virtually placed in an organization to develop 3 portfolio products. The products must benefit that community/organization and demonstrate their skills in the selected competencies. The process, requirements and options to conduct the virtual internship are described in the "MPH Portfolio and Capstone Student Handbook" available to all students. Portfolio products are graded by the MPH Graduation Committee, formed with faculty from NEIT's College of Graduate and Professional Studies (GPS).

**PH 565 Ethics and Public Health Law**

4 Class Hours, 4 Quarter Credit Hours

PH 565 Ethics and Public Health Law 4 Class Hours 4 Quarter Credit Hours This course is a study of the social and legal bases for public health, including constraints imposed by constitutional, statutory, and conventional requirements. It addresses the sources of law and their interrelationships, legal protections of fundamental rights, government police powers, social welfare and entitlements programs, health care regulation, access to health care, ethics, legal liability, health care financing, and legal influences on public health programs, including preparation of administrative regulations. Students are also exposed to ethical issues in public health problems, political and advocacy aspects of the law-making process as it relates to public health.

**PH 571 Capstone Preparation**

12 Lab Hours, 4 Quarter Credit Hours

In this course, students conduct and prepare a comprehensive literature review in preparation for their Capstone project. The literature must provide the scientific evidence identifying a gap in research or practice, such as a new option for an intervention, an innovative approach to a current public health challenge, a new method to address health equity, a population underserved for a specific service, etc., which will validate the purpose of the Capstone project. This literature review is rigorously prepared following APA guidelines and will be an appendix for the Capstone project in PH 581.

**PH 580 Public Health Seminar**

4 Class Hours, 4 Quarter Credit Hours

Prerequisites: PH 535 and PH 545 and PH 550 and PH 551 and MGM 514 and PH 552

This simulation experience “places” students as new public health professionals starting jobs where they need to use all their problem-solving skills, knowledge and resources (tools, data, theories, frameworks, logic models) acquired in the MPH program to address the challenges and personnel situations presented each week. Students work in teams and individually to fulfill the job responsibilities and report to high authorities in the organization.

**PH 581 Capstone**

12 Lab Hours, 4 Quarter Credit Hours

Prerequisites: PH 571

In this student-driven course students will prepare a comprehensive, written public health product (“Capstone”) which they had already selected and received individual approval from the MPH Director prior to enrolling in PH 571. The product must integrate coursework and experience into an applied, written, well-reasoned contribution to a public health discipline, that demonstrates proficiency in 4 selected competencies. The capstone project will use critical thinking, interpretation of research, evidence-based practices and/or program evaluation results, to make a meaningful contribution to public health while promoting health equity and/or population health. The student will present the Capstone project to NEIT’s students and faculty. The Capstone is graded by a Committee formed with members of the College of Graduate and Professional Studies (GPS).

**PH 585 Capstone**

12 Lab Hours, 3 Quarter Credit Hours

Prerequisites: PH 571 and PH 561

In this student-driven course students will prepare a comprehensive, written public health product (“Capstone”) which they had already selected and received individual approval from the MPH Director prior to enrolling in PH 561 and PH 571. The product must integrate coursework and experience into an applied, written, well-reasoned contribution to a public health discipline, that demonstrates proficiency in 4 selected competencies. The capstone project will use critical thinking, interpretation of research, evidence-based practices and/or program evaluation results, to make a meaningful contribution to public health while promoting health equity and/or population health. The student will present the Capstone project to NEIT’s students and faculty. The Capstone is graded by a Committee formed with members of the College of Graduate and Professional Studies (GPS).