

# DEPARTMENT OF POPULATION HEALTH

JOSEPH DAKE, *chair*

The Department of Population Health offers a variety of degree options and graduate courses. In health, a master of public health with a specialization in health promotion and education is available as well as the doctor of philosophy degree in health education.

## Degrees Offered

- Master of Public Health: Environmental and Occupational Health (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/master-public-health-environmental-occupational/>)
- Master of Public Health: Generalist (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/master-public-health-nutrition/>)
- Master of Public Health: Health Promotion and Education (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/master-public-health-promotion-education/>)
- Masters of Public Health Policy and Law (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/master-public-health-public-health-policy-and-law/>)
- Master of Public Health: Public Health Epidemiology (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/master-public-health-epidemiology/>)
- MS in Occupational Health (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/ms-occupational-health/>)
- Graduate Certificate in Biostatistics and Epidemiology (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/certificate-biostatistics-epidemiology/>)
- Graduate Certificate in Epidemiology (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/certificate-epidemiology/>)
- Graduate Certificate in Occupational Health (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/certificate-occupational-health/>)

## Dual Majors (<https://catalog.utoledo.edu/graduate/health-human-services/graduate-programs-departments/population-health/dual-majors/>)

- Environmental and Occupational Health/Health Promotion and Education, MPH (Dual Major)
- Environmental and Occupational Health/Public Health Epidemiology, MPH (Dual Major)
- Environmental and Occupational Health/Public Health Policy and Law, MPH (Dual Major)

- Health Promotion and Education/Public Health Policy and Law, MPH (Dual Major)
- Public Health Epidemiology/Health Promotion and Education, MPH (Dual Major)
- Public Health Epidemiology/Public Health Policy & Law, MPH (Dual Major)

### PUBH 5020 Occupational Health

[3 credit hours]

Hazardous materials, mathematics, anatomy, and physiology; hazard recognition for harmful agents; methods, standards, recommendations, and instruments used to evaluate hazards; techniques for hazard control; occupational health programs and regulations; communication and ethics.

**Term Offered:** Fall

### PUBH 5030 Issues in Global Health

[3 credit hours]

Course examines current issues and trends that affect international health, including delivery systems in other countries, and examines a variety of environmental, economic, and political factors that play a role in the transmission and treatment of human diseases.

**Term Offered:** Spring

### PUBH 5060 Occupational Safety

[3 credit hours]

Scientific, regulatory and management principles applicable to safety and health programs, administration, and controlling unsafe conditions/acts. Includes a field component.

**Term Offered:** Fall

### PUBH 5160 Environmental Health

[3 credit hours]

Scientific, regulatory and management principles applicable to human disease associated with food, water, air and soil contamination. Focuses on biology and chemistry of contamination, exposure monitoring and contaminant control. Includes a field component.

**Term Offered:** Spring, Fall

### PUBH 5260 Haz Mat and Emerg Response

[3 credit hours]

Scientific, regulatory and management principles applicable to characteristics, control, storage, transport and disposal of chemical, biological and radiological agents; disaster preparedness and emergency response; personal protective equipment and site assessment/monitoring. Includes a field component.

**Term Offered:** Spring, Summer, Fall

### PUBH 5310 Chemical Agents

[3 credit hours]

Scientific and management principles applicable to the qualitative and quantitative evaluation of chemical agents associated with human diseases resulting from various occupational and environmental exposures. Introduction to the exposure assessment process including basic characterization, establishing exposure groups, and judging exposure profiles. Includes laboratory and field components.

**Term Offered:** Spring, Fall

**PUBH 5370 Crisis Communication**

[3 credit hours]

Concepts, principles, strategies and "tools" of effective crisis management and communication from a public health perspective. Students learn to interact with stakeholders in situations posing a high risk to the health and safety of the public, and to communicate properly with the public through the broadcasting media and internet.

**Term Offered:** Fall

**PUBH 5410 Hazard Control**

[3 credit hours]

Scientific and management principles of air contaminant modeling; control of indoor and outdoor (ambient) air pollution; operation of dilution and location exhaust ventilation systems; design of ventilation systems; respiratory and other personal protective equipment and programs commonly used in the workplace. Includes a laboratory component.

**Term Offered:** Spring

**PUBH 5510 Social, Economic, and Political Implications of Infectious Diseases**

[3 credit hours]

Fall. Examines and discusses the social, economic and political implications of newly emerging and existing infectious diseases and their impact on international health and commerce.

**Term Offered:** Fall

**PUBH 5520 Biological Agents**

[3 credit hours]

Scientific principles and practices applicable to the pathogenicity, evaluation and control of microbiological agents, parasitic agents, and some biological vectors associated with human diseases resulting from various environmental exposures. Content includes normal/abnormal human physiology relative to exposure, exposure assessment, and exposure control.

**Term Offered:** Spring, Summer, Fall

**PUBH 5560 Health, Safety, and Worker Well-being**

[3 credit hours]

Presents concepts related to improving worker well-being – or the ability of people to address normal stresses, work productively, and achieve their highest potential. Builds on foundational knowledge of hazard assessment and controls, and introduces students to the model of Total Worker Health® (TWH). Experts from Owens Illinois (OI) provide application of course content to safety and health, including integration of health protection and promotion, virtual reality machine training, and safety metrics and management. Includes a field component.

**Term Offered:** Spring

**PUBH 5620 Physical Agents**

[3 credit hours]

Scientific, regulatory, and management principles applicable to the assessment and control of exposure to physical agents (noise, thermal stress, ionizing and non-ionizing radiation). Includes laboratory and field components.

**Term Offered:** Spring

**PUBH 5700 Risk Assessment**

[3 credit hours]

Scientific and management principles of human health risk assessment including hazard identification, toxicity assessment, exposure assessment, risk characterization and communication relative to public, environmental, and occupational health.

**Term Offered:** Summer, Fall

**PUBH 5720 Exposure Assessment Strategies**

[3 credit hours]

Exposure assessment is an integral part of occupational and environmental health. This course will focus on the statistics and methods needed to assess exposures in the workplace.

**Prerequisites:** PUBH 6000 with a minimum grade of D- or PUBH 600 with a minimum grade of D-

**Term Offered:** Spring

**PUBH 6000 Quantitative and Qualitative Data Analysis in Public Health**

[3 credit hours]

This course includes introductory content on both quantitative and qualitative methods and relevant data analyses. Quantitative: Statistical methods and principles necessary for understanding and interpreting data used in public health. Topics include descriptive statistics, statistical comparison groups, correlation, and regression. Includes a lab component using SPSS statistical package. Qualitative: Methods for gathering qualitative data and thematic analysis of data in health service research. Activities include analyzing data for emergent themes as well as interpreting and presenting findings.

**Term Offered:** Spring, Fall

**PUBH 6001 Biostatistics for Medical Sciences**

[3 credit hours]

An introduction to descriptive statistics including measurement of central tendency, dispersion, correlation and regression, hypothesis testing, and select nonparametric methods, including the use of statistical package(s).

**Term Offered:** Fall

**PUBH 6010 Public Health Epidemiology**

[3 credit hours]

The course will present principles of the epidemiology method including problem solving. Various study designs will be discussed, including prospective and retrospective studies, analytic, and experimental methods.

**Term Offered:** Spring, Fall

**PUBH 6020 Management and Leadership in Public Health**

[3 credit hours]

An introduction to the leadership and management principles necessary for the delivery of public health programs, intervention, and outreach, including fostering collaboration, effective communication, consensus building, negotiation, cultural awareness, budget and resource management, evaluation, coalition building, vision creation, mediation, empowering others, and guiding decision making.

**Term Offered:** Spring, Summer, Fall

**PUBH 6030 Advanced Epidemiology**

[3 credit hours]

This course covers principles and methods of epidemiology in depth. The topics include causal inference, risk and effect, confounding, interaction, randomization, and matching. Special emphasis is given to design and interpretation of epidemiological studies.

**Term Offered:** Summer**PUBH 6040 Public Health Administration**

[3 credit hours]

This course provides a basic understanding of the nature of public health administration, focusing on fundamentals, the recent changes, associated administrative and organizational arrangements that have been developed and the roles and responsibilities of public health administrators.

**Term Offered:** Spring, Fall**PUBH 6050 Concepts and Issues in Environmental Health**

[3 credit hours]

The course will review environmental concepts, focusing on water, soil, food, and diseases as they pertain to public health. Emergency preparedness for environmental events will be discussed. The impact of environmental events on public health, preparations, and appropriate responses will be included. The relationship between environmental health and public health will be emphasized.

**Term Offered:** Spring, Summer, Fall**PUBH 6060 Advanced Biostatistics**

[3 credit hours]

Advanced statistical techniques with particular emphasis on problems in public health. Multiple regression, methods of analysis of variance, categorical data analysis including logistic regression, non parametric and survival analysis. Problems whose solution involves using a statistical program (e.g., SPSS).

**Term Offered:** Spring, Fall**PUBH 6070 Genetic Epidemiology**

[3 credit hours]

Introduces genetic epidemiology methods, principles of population genetics including linkage and association studies used in assessing familial aggregation, and transmission patterns for identifying the genetic basis of common diseases.

**Prerequisites:** (PUBH 6000 with a minimum grade of C or PUBH 8000 with a minimum grade of C) and (PUBH 6010 with a minimum grade of C or PUBH 8010 with a minimum grade of C) or (PUBH 600 with a minimum grade of C or PUBH 800 with a minimum grade of C) and (PUBH 601 with a minimum grade of C or PUBH 801 with a minimum grade of C)

**Term Offered:** Summer**PUBH 6080 Social Determinants of Health**

[3 credit hours]

Social determinants of health are social conditions, factors, and systems that place people from different socio-demographic and socioeconomic group (social class, gender, race/ethnicity, and place of birth) at differential risk of poor health and premature mortality. Mechanisms through which these factors are hypothesized to influence health, such as stress and access to health resources and constraints, will be discussed, as well as the ways in which these mechanisms can operate across the life course.

**Term Offered:** Spring, Fall**PUBH 6090 Issues in Public Health**

[3 credit hours]

Examination of various contemporary issues in public health. Includes social, economic, political, and community problems in the provision of health services, health manpower, and payment for health care.

**PUBH 6100 Environ/Occup Epidemiology**

[3 credit hours]

The course focuses on the application of epidemiological techniques to the study of effects of occupational and environmental exposures. Prerequisite: PUBH600 and 601.

**PUBH 6110 Categorical Data Analysis**

[3 credit hours]

This course introduces the theory and application of methods for categorical data, with emphasis on biomedical and public health applications. Topics include contingency tables, log-linear, logistic regression and Rausch models, multivariate methods for matched pairs and longitudinal data. The methods are illustrated with SAS and/or SPSS, R.

**Term Offered:** Spring, Summer**PUBH 6120 Epidemiology Infectious Diseases**

[3 credit hours]

Provides an overview of major infectious diseases affecting public health in the U.S. and worldwide; introducing the basic epidemiologic methods for surveillance and investigation of infectious disease outbreaks.

**Term Offered:** Spring, Fall**PUBH 6130 Molecular Epidemiology**

[3 credit hours]

The course focuses on the application of epidemiological techniques to the study of effects of occupational and environmental exposures.

**Term Offered:** Fall**PUBH 6150 Clinical Epidemiology**

[3 credit hours]

This course focuses on epidemiologic concepts and methods in clinical medicine. Topics include clinical measurements and outcomes, risk, prognostic factors, clinical diagnosis, study design, decision analysis, clinical research and meta-analysis.

**Term Offered:** Spring**PUBH 6160 Reproductive Epidemiology**

[3 credit hours]

Reproductive health issues from the pre-conception, prenatal delivery, and postnatal periods and emphasizes health issues affecting women, men, and infants. A focus on current research, controversial issues and methodological issues.

**Prerequisites:** PUBH 6010 with a minimum grade of D- or PUBH 601 with a minimum grade of D-

**Term Offered:** Spring**PUBH 6170 Molec and Genomic Epidemiology**

[3 credit hours]

Presents concepts and methods of molecular and genetic epidemiology relevant to the study of prevalent diseases in the population. Topics include biomarkers, polymorphism and gene-environment interaction.

The evolution and function of the genomics and a synopsis of epidemiological design and analysis are included.

**PUBH 6180 Cancer Epidemiology**

[3 credit hours]

Focuses on a number of cancers, including the most incident cancers in the United States. Provides a broad overview of cancer epidemiology and basic substantive knowledge regarding many cancers and their risk factors, prevention, and biology and pathogenesis.

**Term Offered:** Spring, Summer, Fall**PUBH 6190 Statistical Packages for Public Health**

[3 credit hours]

The purpose of this 3 credit course is to develop analysis skills using the SAS statistical package, SPSS, and R for students that already have a basic knowledge of biostatistics.

**Prerequisites:** PUBH 6000 with a minimum grade of D- or PUBH 8000 with a minimum grade of D-

**Term Offered:** Fall**PUBH 6200 Methods, Materials for PUBH**

[3 credit hours]

Introduces students to resource materials and methods appropriate for public health education. Students will use various mediums of instruction in direct application to public health programs.

**Term Offered:** Spring, Fall**PUBH 6210 Public Health Management**

[3 credit hours]

Students develop a deeper understanding of the principles of management and their application in directing a public health agency. While the primary focus is on human resource management, strategic management, strategic planning, organizational positioning and related topics are also discussed (BGSU).

**Prerequisites:** PUBH 6040 with a minimum grade of C

**Term Offered:** Spring, Fall**PUBH 6220 Budget and Administration in Public Health**

[3 credit hours]

An examination of the basic components of budgeting and fiscal management as applied to public health organizations.

**Prerequisites:** PUBH 6280 with a minimum grade of C

**Term Offered:** Summer**PUBH 6250 Nutritional Epidemiology**

[3 credit hours]

**PUBH 6260 Race, Inequality, and Social Policy**

[3 credit hours]

In this course, we grapple with the following questions and explore their connection to public health and working toward health equity. What is social policy? How has social policy both exacerbated and ameliorated race and class inequality in the U.S.? Why does inequality matter? How are identities, experiences, and structures of race and class shaped by social policy? What can individuals and communities do to move toward greater equality in U.S. society?

**Term Offered:** Fall**PUBH 6270 Racism, Antiracism, and Health**

[3 credit hours]

In this graduate course, we will focus on 1) the health implications of racism, and 2) the ways in which antiracism, in both research and practice, can be used to advance health equity. We will investigate the specific avenues by which racism in its various forms produces health inequality. How does racism impact the physical and mental wellbeing of racial groups? What frameworks and methods can researchers use to effectively study the effects of racism? What strategies or interventions can health professionals and public servants in a variety of fields use to effectively address racism in their work?

**Term Offered:** Spring**PUBH 6280 Economics, Marketing, and Human Resource Management in Public Health**

[3 credit hours]

Emphasis on integrated applications of economics, marketing, and human resources in public health agencies and workplaces. Prerequisite: Enrollment in MPH program or permission of instructor.

**Prerequisites:** PUBH 6040 with a minimum grade of C

**Term Offered:** Spring**PUBH 6310 Public Health Assessment and Planning**

[3 credit hours]

This course introduces the principles of health promotion program assessment and planning. Students learn the process of community health assessment, precursors to program planning, as well as the purposes, procedures, terminology, and specific techniques in the planning process.

**Term Offered:** Fall**PUBH 6320 Implementation of Public Health Programs**

[3 credit hours]

This course is designed to prepare students to implement health education programs in the community. Emphasis will be placed on a variety of health education methods and strategies to plan, promote, present and evaluate health promotion activities.

**Prerequisites:** PUBH 6310 with a minimum grade of D-

**Term Offered:** Spring**PUBH 6330 Public Health and Aging**

[3 credit hours]

Examines public health and aging issues in contemporary society. Introduces physical, cognitive and affective function from a public health perspective. Prevention and health promotion models are included.

**Term Offered:** Summer**PUBH 6350 Public Health Law**

[3 credit hours]

Development of knowledge necessary for functioning as a health care professional; includes an introduction to our legal system in contexts that are important for public health, as well as a detailed analysis of the law related to issues of primary concern to public health professionals.

**Term Offered:** Summer

**PUBH 6410 Global Perspectives on Public Health and Disaster Preparedness**

[3 credit hours]

This course introduces the introductory healthcare learner (including but not limited to MD, MPH, PA, MSN, MSBS, OT, PT) to specific principles of global perspectives on disaster management and response. Covers epidemiology of various diseases and population health issues from a global and domestic perspective. Employs an all-hazards framework, providing essential skills to function in the event of a catastrophe.

Guest speakers from healthcare disciplines who work internationally will present first-hand experiences in managing disasters.

**Term Offered:** Spring**PUBH 6420 Social Marketing in Health**

[3 credit hours]

The Centers for Disease Control and Prevention (CDC) identify social marketing as a practice allied with Health Education and Health Promotion. The CDC encourages programs to apply the principles of social marketing to health behavior change efforts in order to increase the effectiveness of interventions. Social marketing uses audience research to determine target audience segmentation into groups with common risk behaviors, motivations, and information channel preferences. Key audience segments are then reached with the mix of intervention strategies formed by the "4 P's" of social marketing, namely product, price, place, and promotion. The final product is designed based on the needs and desires of the consumer and persuasive messages promoting behavior change are promoted to the target audience. Continuous evaluation and message revision allows for ongoing refinement on the basis of consumer feedback.

**Term Offered:** Spring**PUBH 6430 Community Mental Health**

[3 credit hours]

In this course, mental health is examined from a public health perspective with a focus on epidemiological, behavioral, sociological and cultural issues. Particular emphasis is placed on the prevention of mental illness, social responses to illness, as well as the social determinants of mental health. Mental health, mental health promotion and community mental health issues are analyzed at individual and population level.

**Term Offered:** Spring, Summer**PUBH 6460 Health Promotion Programs**

[3 credit hours]

**PUBH 6500 Disaster Preparedness/Response**

[3 credit hours]

**PUBH 6510 Issues in Pandemic Preparedness and Response**

[3 credit hours]

By means of synchronous, asynchronous, audiovisual, and simulation platforms, the learner will develop an in-depth knowledge concerning how the healthcare infrastructure of a community must plan for, respond to, and recover from a pandemic. The course is divided into four topic areas: 1) introduction; 2) preparedness; 3) response; and 4) recovery.

**Term Offered:** Spring, Fall**PUBH 6520 Public Health Nutrition**

[3 credit hours]

Explore the relationship between dietary intake and nutritional status and health of individuals and groups. Investigates role of dietary intake in reducing risk and treating chronic diseases. Explore public health approaches to alleviate nutritional problems.

**Term Offered:** Spring, Summer**PUBH 6550 Chronic Disease Epidemiology**

[3 credit hours]

Epidemiology of selected chronic diseases and non-infectious conditions: cancer, cardiovascular diseases, musculoskeletal diseases and other chronic diseases. Emphasis on classification, rates, associations, etiology, prevention and control.

**Prerequisites:** PUBH 6010 with a minimum grade of C or PUBH 601 with a minimum grade of C

**Term Offered:** Spring, Summer, Fall**PUBH 6560 Interdisciplinary Crisis Management for Medical and Public Health Professionals**

[3 credit hours]

The purpose of this semester course is to introduce the interdisciplinary healthcare learner (including but not limited to MD, PA, MPH, MSN, OT and PT students) to specific principles of epidemiology and disaster medicine employing an all-hazards framework and to provide essential skills enabling proper functioning in the event a catastrophe arises in the near future. The course will include lectures, simulation exercises and independent web-assisted content.

**Term Offered:** Spring, Fall**PUBH 6600 Health Behavior**

[3 credit hours]

Examines the role of behaviors on health status and how to influence and understand behavior through use of cognitive models and change theory.

**Term Offered:** Spring, Summer, Fall**PUBH 6620 Introduction to Health Policy and Health Systems**

[3 credit hours]

This course examines public health and healthcare policy from a public health perspective. It emphasizes the interrelatedness of law, the policymaking process, and governmental public health; addresses essential issues in health policy and law (e.g., health insurance, health economics, government health insurances, the uninsured); and introduces health policy analysis.

**Term Offered:** Spring, Fall**PUBH 6630 Public Health Advocacy**

[3 credit hours]

An examination of the importance of advocacy for the individual, community, and public health professionals. Special emphasis will be placed on developing advocacy-based skills to effectively advocate at the micro and macro level. In addition, students will participate in advocacy efforts external to the university to gain experience that enriches the student's training.

**Term Offered:** Spring



**PUBH 6690 Public Health Research Design**

[3 credit hours]

This course will cover the components of public health research methods. After completing the course, students will be able to write a research proposal to answer a question of interest. Additionally, students will be able to analyze evidence in order to engage in evidence-based public health practice. The course will be offered at the masters and doctoral levels with a focus on research methods utilized in public health and health education. The course is relevant for students in all majors within the M.P.H. program, and is required for students in the Health Education Ph.D. program.

**Term Offered:** Spring**PUBH 6730 Research Environmental Health**

[3 credit hours]

Students will participate in selected ongoing research programs of members of the faculty. May be repeated for credit.

**Term Offered:** Spring, Summer, Fall**PUBH 6790 Indep Study in Biostatistics**

[0-3 credit hours]

This courses addresses areas of biostatistics not covered by a regular course offering. It is intended to provide students the knowledge and experience needed in that area. This course is designed for public health students and could be beneficial to Ph.D. students, specifically those who need advanced statistical techniques for their dissertation. Topics include survival analysis, statistical models in carcinogenesis, statistical genetics, nonparametric statistics and multivariate techniques. May be repeated for credit.

**Term Offered:** Spring, Summer, Fall**PUBH 6800 Evaluation Of Health Programs**

[3 credit hours]

An exploration of types of program evaluation, evaluation models, data collection, types of data, data quality, evaluation reports, standard data collection instruments and ethical issues in health program evaluation.

**Term Offered:** Spring, Fall**PUBH 6810 Independent Study**

[1-4 credit hours]

Supervised independent completion of an individual or group project or activity, or readings, on a specialized topic in public health. May be repeated for credit twice up to maximum of 8 hours.

**Term Offered:** Spring, Summer, Fall**PUBH 6830 Internship in Public Health**

[1-4 credit hours]

Supervised internship in public health. May be repeated for credit. Internship for all PHA and some PHN majors. (BGSU).

**Term Offered:** Spring, Summer, Fall**PUBH 6840 Project in Public Health**

[1-4 credit hours]

Supervised practicum experience in public health or completion of a project related to public health. Scholarly project for all PHA and some PHN majors.

**Term Offered:** Spring, Summer, Fall**PUBH 6850 Capstone Seminar**

[3 credit hours]

Integrative Seminar in Public Health (3). Systematic study of chosen topics in public health (BGSU).

**Term Offered:** Spring, Summer, Fall**PUBH 6890 Indep Study in Public Health**

[1-3 credit hours]

The student and instructor will agree on a program of study that will enable the student to achieve specific learning objectives in environmental health. May be repeated for credit.

**Term Offered:** Spring, Summer, Fall**PUBH 6900 Interprofessional Education for Public Health**

[1 credit hour]

This 1-Credit hour course for Public Health students has been designed to provide a variety of interprofessional learning activities and educational experiences that include learning modules related to current health topics and issues in our communities such as social determinants of health, human trafficking, poverty, and resilience. Students are required to complete selected educational experiences that provides opportunities to collaborate with students from other health care professions (Athletic Training, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant, Public Health, Respiratory Therapy, Social Work, and Speech Language Pathology) using an experiential learning approach.

**Term Offered:** Spring, Fall**PUBH 6940 Internship in Occupational Health**

[1-3 credit hours]

Comprehensive or focused practical training in industrial hygiene/ occupational health at a designated agency, organization, or company.

**Term Offered:** Spring, Summer, Fall**PUBH 6950 Integrative Learning Experience**

[2 credit hours]

Seminar course which serves as the culminating experience of the MPH program. Students are required to produce a high-quality written product that is appropriate to the student's educational and professional objectives and that must demonstrate both Foundational and Major Competencies.

**Term Offered:** Spring, Summer, Fall**PUBH 6960 Internship in Public Health**

[1-4 credit hours]

Comprehensive or focused practical training in environmental and occupational health at a designated agency, organization, or company.

**Term Offered:** Spring, Summer, Fall**PUBH 6970 Project in Public Health**

[1-4 credit hours]

Independent development by a student with approval and guidance by a Major Advisor, of a paper, manual, software, etc. applicable to a specific area of environmental and occupational health.

**Term Offered:** Spring, Summer, Fall**PUBH 6980 Seminar in Public Health**

[1-3 credit hours]

A systematic study of selected topics in public health. Course meets for three consecutive semesters. Students may begin any semester, but must complete in sequence. Students register for one credit each term for a cumulative total of three consecutive semesters. May be repeated for credit.

**PUBH 6990 Thesis Research**

[1-4 credit hours]

**PUBH 8000 Quantitative and Qualitative Data Analysis in Public Health**

[3 credit hours]

This course includes introductory content on both quantitative and qualitative methods and relevant data analyses. Quantitative: Statistical methods and principles necessary for understanding and interpreting data used in public health. Topics include descriptive statistics, statistical comparison groups, correlation, and regression. Includes a lab component using SPSS statistical package. Qualitative: Methods for gathering qualitative data and thematic analysis of data in health service research. Activities include analyzing data for emergent themes as well as interpreting and presenting findings.

**Term Offered:** Spring, Fall**PUBH 8010 Public Health Epidemiology**

[3 credit hours]

The course will present principles of the epidemiology method including problem solving. Various study designs will be discussed, including prospective and retrospective studies, analytic, and experimental methods.

**Term Offered:** Spring, Fall**PUBH 8020 Management and Leadership in Public Health**

[3 credit hours]

An introduction to the leadership and management principles necessary for the delivery of public health programs, intervention, and outreach, including fostering collaboration, effective communication, consensus building, negotiation, cultural awareness, budget and resource management, evaluation, coalition building, vision creation, mediation, empowering others, and guiding decision making.

**Term Offered:** Spring, Summer, Fall**PUBH 8030 Advanced Epidemiology**

[3 credit hours]

This course covers principles and methods of epidemiology in depth. The topics include causal inference, risk and effect, confounding, interaction, randomization, and matching. Special emphasis is given to design and interpretation of epidemiological studies.

**Term Offered:** Summer**PUBH 8060 Advanced Biostatistics**

[3 credit hours]

Advanced statistical techniques with particular emphasis on problems in public health. Multiple regression, methods of analysis of variance, categorical data analysis including logistic regression, non parametric and survival analysis. Problems whose solution involves using a statistical program (e.g., SPSS).

**Term Offered:** Spring, Fall**PUBH 8090 Issues in Public Health**

[3 credit hours]

Examination of various contemporary issues in public health. Includes social, economic, political, and community problems in the provision of health services, health manpower, and payment for health care.

**PUBH 8110 Categorical Data Analysis**

[3 credit hours]

**PUBH 8120 Epidemiology Infectious Diseases**

[3 credit hours]

Provides an overview of major infectious diseases affecting public health in the U.S. and worldwide; introducing the basic epidemiologic methods for surveillance and investigation of infectious disease outbreaks.

**Term Offered:** Spring, Fall**PUBH 8130 Molecular Epidemiology**

[3 credit hours]

The course focuses on the application of epidemiological techniques to the study of effects of occupational and environmental exposures.

**Term Offered:** Fall**PUBH 8150 Clinical Epidemiology**

[3 credit hours]

This course focuses on epidemiologic concepts and methods in clinical medicine. Topics include clinical measurements and outcomes, risk, prognostic factors, clinical diagnosis, study design, decision analysis, clinical research and meta-analysis.

**Term Offered:** Spring**PUBH 8160 Reproductive Epidemiology**

[3 credit hours]

Additional assignments are here for students who will take this course as PUBH 8160. Covers broad reproductive health issues from the pre-conception, pre-natal, delivery, and post-natal periods and emphasizes how these issues affect women, men, babies, and infants. Relevant methodological and programmatic issues will be presented with practical illustrations from domestic and international settings. Guest speakers, including health care providers, will give real world experience and insight to these topics of study.

**Prerequisites:** PUBH 6010 with a minimum grade of D- and PUBH 8010 with a minimum grade of D-**Term Offered:** Spring**PUBH 8170 Molecular and Genomic Epi**

[3 credit hours]

**PUBH 8180 Cancer Epidemiology**

[3 credit hours]

Focuses on a number of cancers, including the most incident cancers in the United States. Provides a broad overview of cancer epidemiology and basic substantive knowledge regarding many cancers and their risk factors, prevention, and biology and pathogenesis.

**Term Offered:** Spring, Summer, Fall**PUBH 8260 Race, Inequality, and Social Policy**

[3 credit hours]

In this course, we grapple with the following questions and explore their connection to public health and working toward health equity. What is social policy? How has social policy both exacerbated and ameliorated race and class inequality in the U.S.? Why does inequality matter? How are identities, experiences, and structures of race and class shaped by social policy? What can individuals and communities do to move toward greater equality in U.S. society?

**Term Offered:** Fall**PUBH 8270 Racism, Antiracism, and Health**

[3 credit hours]

In this graduate course, we will focus on 1) the health implications of racism, and 2) the ways in which antiracism, in both research and practice, can be used to advance health equity. We will investigate the specific avenues by which racism in its various forms produces health inequality. How does racism impact the physical and mental wellbeing of racial groups? What frameworks and methods can researchers use to effectively study the effects of racism? What strategies or interventions can health professionals and public servants in a variety of fields use to effectively address racism in their work?

**Term Offered:** Spring

**PUBH 8330 Public Health and Aging**

[3 credit hours]

Examines public health and aging issues in contemporary society. Introduces physical, cognitive, and affective function from a public health perspective. Prevention and health promotion are included.

**Term Offered:** Summer**PUBH 8410 Global Perspectives on Public Health and Disaster****Preparedness**

[3 credit hours]

This course introduces the introductory healthcare learner (including but not limited to MD, MPH, PA, MSN, MSBS, OT, PT) to specific principles of global perspectives on disaster management and response. Covers epidemiology of various diseases and population health issues from a global and domestic perspective. Employs an all-hazards framework, providing essential skills to function in the event of a catastrophe. Guest speakers from healthcare disciplines who work internationally will present first-hand experiences in managing disasters.

**Term Offered:** Spring**PUBH 8420 Social Marketing in Health**

[3 credit hours]

The Centers for Disease Control and Prevention (CDC) identify social marketing as a practice allied with Health Education and Health Promotion. The CDC encourages programs to apply the principles of social marketing to health behavior change efforts in order to increase the effectiveness of interventions. Social marketing uses audience research to determine target audience segmentation into groups with common risk behaviors, motivations, and information channel preferences. Key audience segments are then reached with the mix of intervention strategies formed by the "4 P's" of social marketing, namely product, price, place, and promotion. The final product is designed based on the needs and desires of the consumer and persuasive messages promoting behavior change are promoted to the target audience. Continuous evaluation and message revision allows for ongoing refinement on the basis of consumer feedback.

**Term Offered:** Spring**PUBH 8430 Community Mental Health**

[3 credit hours]

In this course, mental health is examined from a public health perspective with a focus on epidemiological, behavioral, sociological and cultural issues. Particular emphasis is placed on the prevention of mental illness, social responses to illness, as well as the social determinants of mental health. Mental health, mental health promotion and community mental health issues are analyzed at individual and population level.

**Term Offered:** Spring, Summer**PUBH 8500 Disaster Preparedness/Response**

[3 credit hours]

**PUBH 8510 Issues in Pandemic Preparedness and Response**

[3 credit hours]

By means of synchronous, asynchronous, audiovisual, and simulation platforms, the learner will develop an in-depth knowledge concerning how the healthcare infrastructure of a community must plan for, respond to, and recover from a pandemic. The course is divided into four topic areas: 1) introduction; 2) preparedness; 3) response; and 4) recovery.

**Term Offered:** Spring, Fall**PUBH 8550 Chronic Disease Epidemiology**

[3 credit hours]

Epidemiology of selected chronic diseases and non-infectious conditions: cancer, cardiovascular diseases, musculoskeletal diseases and other chronic diseases. Emphasis on classification, rates, associations, etiology, prevention and control.

**Prerequisites:** PUBH 6010 with a minimum grade of C or PUBH 601 with a minimum grade of C**Term Offered:** Summer**PUBH 8560 Interdisciplinary Crisis Management for Medical and Public Health Professionals**

[3 credit hours]

The purpose of this semester course is to introduce the interdisciplinary healthcare learner (including but not limited to MD, PA, MPH, MSN, OT and PT students) to specific principles of epidemiology and disaster medicine employing an all-hazards framework and to provide essential skills enabling proper functioning in the event a catastrophe arises in the near future. The course will include lectures, simulation exercises and independent web-assisted content.

**Term Offered:** Spring, Fall**PUBH 8620 Introduction to Health Policy and Health Systems**

[3 credit hours]

In this course, mental health is examined from a public health perspective with a focus on epidemiological, behavioral, sociological and cultural issues. Particular emphasis is placed on the prevention of mental illness, social responses to illness, as well as the social determinants of mental health. Mental health, mental health promotion and community mental health issues are analyzed at individual and population level.

**Term Offered:** Spring, Fall**PUBH 8630 Public Health Advocacy**

[3 credit hours]

An examination of the importance of advocacy for the individual, community, and public health professionals. Special emphasis will be placed on developing advocacy-based skills to effectively advocate at the micro and macro level. In addition, students will participate in advocacy efforts external to the university to gain experience that enriches the student's training.

**Term Offered:** Spring**PUBH 8900 Interprofessional Education for Public Health**

[1 credit hour]

This 1-Credit hour course for Public Health students has been designed to provide a variety of interprofessional learning activities and educational experiences that include learning modules related to current health topics and issues in our communities such as social determinants of health, human trafficking, poverty, and resilience. Students are required to complete selected educational experiences that provides opportunities to collaborate with students from other health care professions (Athletic Training, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant, Public Health, Respiratory Therapy, Social Work, and Speech Language Pathology) using an experiential learning approach.

**Term Offered:** Spring, Fall