

PUBLIC HEALTH (PUBH)

PUBH 5201. Essentials of Social Inequality and Health Disparities. (3 Credits)

Introduction to (a) the extent of health disparities across the US population, (b) how social inequality contributes to health disparities, and (c) why attention to social inequality is essential to the effective practice of clinical medicine and dental medicine. Examination of how society's social, economic, political and cultural institutions are structured and why they perpetuate the unequal distribution of opportunities that systematically limit the life chances and experiences of individuals. A range of social determinants (race/racism, poverty, income inequality, education, environmental conditions, social capital, social cohesion, social mobility, safety/security, criminal justice system) are considered that may influence health, either directly or as pathways for other determinants. Addresses the function of public health assessment, provides students with a conceptual basis for the complementary course, PUBH 5202.

PUBH 5202. Eliminating Social Inequality and Health Disparities. (3 Credits)

Examination of the evidence for structural, community, and individual-level interventions to reduce the impact of inequity on health and health care utilization. Identification and implementation of multi-level interventions that may reduce inequities by altering the social, economic, and other structural aspects of the environment. It will also address challenges of implementation and ways to reduce potential barriers. The course builds on the conceptual basis of PUBH 5201.

PUBH 5403. Health Administration. (3 Credits)

Examination of past, present, and proposed approaches to the organization and management of health care services. Emphasis is on the role and functioning of the manager and the evolution of health care policy and trends as they affect managerial roles.

Enrollment Requirements: Open only to Master of Public Health (MPH) and Foundations of Public Health Certificate students; others with department consent.

PUBH 5404. Environmental Health. (3 Credits)

Explores the policy, political and public health implications of such issues as air pollution, drinking water, exposure to hazardous chemicals, indoor air pollution, food protection, lead poisoning, housing, international issues, etc. Provides the student with some basic technical information and familiarity with terms for a better understanding of policy and political decisions and health effects of environmental exposures.

Enrollment Requirements: Open only to Master of Public Health (MPH) and Foundations of Public Health Certificate students; others with department consent.

PUBH 5405. Social and Behavioral Foundations of Public Health. (3 Credits)

Introductory survey emphasizing basic social science concepts in the analysis of public health including orientations toward health, disease and health care, the origins and distribution of health care resources, and the role of social movements and research in improving public health.

Enrollment Requirements: Open only to Master of Public Health (MPH) and Foundations of Public Health Certificate students; others with department consent.

PUBH 5406. Law and Public Health. (3 Credits)

Introduction to the American legal system as it relates to health care and public health. Sessions present important applications of law to health including the powers of state governments, public health at the federal level, hospital, physician and HMO liability, emergency care and medical research, mental health law, reproductive health and the right to privacy, the right to refuse treatment and end of life issues, privacy and confidentiality in health care, infectious disease law and disability discrimination, and public health policy and advocacy.

Enrollment Requirements: Open only to Master of Public Health (MPH) and Foundations of Public Health Certificate students; others with department consent.

PUBH 5407. Practicum in Public Health. (3 Credits)

Under faculty guidance, students undertake an organized set of activities that responds to an identified need of a public health agency or health-related organization. The activities may involve the policy development, planning, implementation, administration or evaluation of public health services, or a combination of such activities. Students should be appropriately advanced before initiating the practicum.

Enrollment Requirements: Four foundational courses from PUBH 5403, 5404, 5405, 5406, 5408, or 5409. Recommended preparation: PUBH 5431.

May be repeated for a total of 6 credits

PUBH 5408. Introduction to Epidemiology and Biostatistics I. (3 Credits)

This is the first of a two-course sequence introducing students to concepts and methods of epidemiology, biostatistics and public health research. Topics include nature of variability, common probability distributions, causal reasoning, control of bias and confounding, descriptive and analytic design of observational and experimental studies, principles of disease screening and clinical efficacy.

Enrollment Requirements: Open only to Master of Public Health (MPH) and Foundations of Public Health Certificate students; others with department consent.

PUBH 5409. Introduction to Epidemiology and Biostatistics II. (3 Credits)

This continuation of a two-course sequence on basic epidemiology, biostatistics and public health research addresses hypothesis generation, data collection methods, point and confidence interval estimation, inference testing, correlation/regression analysis, multivariable interaction, effect modification, power and meta-analysis. Evaluation of study designs, research methods and statistical procedures in clinical and public health literature will be stressed.

Enrollment Requirements: PUBH 5408. Open only to Master of Public Health (MPH) or Foundations of Public Health Certificate students; others with department consent.

PUBH 5411. Introduction to Interprofessional Public Health Practice. (3 Credits)

This course, taken near the beginning of a student's matriculation toward the Master of Public Health (M.P.H.) degree, presents theories and models of successful interprofessional public health practice. It draws on a competency-focused, case-based pedagogy to facilitate student engagement as they gain skills needed for effective collaborations with community-based practitioners and other stakeholders in addressing system-level population health concerns.

Enrollment Requirements: Open only to Master of Public Health (MPH) students; others with department consent.

PUBH 5414. Health Economics. (3 Credits)

Introduction to economic theory and various applications of economics in the analysis of the U.S. health care system.

PUBH 5419. Public Health Agencies. (3 Credits)

Takes organization and management theory into practice. The focus is on governmental and non-profit agency management and administration. Emphasis is on developing and defending budgets, personnel management, working within the political context, with the community and with multiple agencies.

PUBH 5430. Public Health Informatics. (3 Credits)

An overview of the basic information skills required to clarify a health-related information need and identify and use appropriate information resources to select materials that answer that need. The course will include discussions of health-related networks and information resources, demonstrations of their appropriate use, class exercises and a semester project.

PUBH 5431. Public Health Research Methods. (3 Credits)

Introduction to conceptualization, methods, and analysis in public health research including: formulation of research questions and hypotheses, development of research and analytic models, use of qualitative (interviewing and observation) and quantitative (secondary and survey data) data collection methods, and qualitative and quantitative data analysis leading to the formulation of research projects.

Enrollment Requirements: Open only to Master of Public Health (MPH) students; others with department consent.

PUBH 5432. SAS Programming and Data Management. (3 Credits)

Focuses on SAS programming to introduce the most commonly used features of the language, including data definition, modification and organization; data manipulation and selection; data display and basic data analysis using descriptive statistics. Students also learn to create datasets using data entry or importing from other programs.

PUBH 5433. Health Program Evaluation. (3 Credits)

Methods of evaluating the implementation and impact of health programs. Topics include: specification of program objectives and components, experimental and quasi-experimental evaluation designs, collection and analysis of program data, and the dissemination and application of evaluation results.

PUBH 5434. Topics in Intermediate Biostatistics. (3 Credits)

An introduction to the interplay of experimental design and data analysis. Begins with a review of statistical estimation and testing. Topics include analysis of variance, linear regression, and power analysis. Applications are emphasized through the demonstration and use of statistical software.

PUBH 5436. Intermediate Epidemiology. (3 Credits)

Major design and implementation issues in epidemiology and biomedical research. By the conclusion of the course, the student should have a better appreciation of the importance and complexities of epidemiological investigation.

PUBH 5440. Public Health Issues in Genetics. (3 Credits)

The Human Genome Project and other research initiatives are providing us with new opportunities to screen, diagnose and provide novel interventions for a range of genetically determined diseases. The goal of this course is to provide sufficient understanding of inheritance patterns and genetics technology to appreciate the associated public health issues.

PUBH 5451. Maternal and Child Health Policy and Programs. (3 Credits)

Examination of maternal and child health (MCH) programs and policy from the past to the present. Children's rights, advocacy and MCH history provide a foundation to understanding the philosophy and importance of MCH. The health and development of children are addressed starting with families and working through each of the developmental cycles: maternal and infant health, preschool, school age, and adolescent health. Topics that are cross-cutting across the MCH spectrum such as health disparities, women's health and international health.

PUBH 5452. Injury and Violence Prevention. (3 Credits)

Injury and violence are major preventable public health problems with predictable patterns. The purpose of this course is to familiarize the student with the epidemiological literature of intentional and unintentional injuries. Focuses on the knowledge and skills required to design, implement, and evaluate scientifically sound community injury prevention and control programs.

PUBH 5453. Chronic Disease Control. (3 Credits)

Chronic diseases are examined from clinical, epidemiological and program planning perspectives. Diseases examined include: selected neoplastic diseases, cardiovascular diseases, chronic obstructive pulmonary diseases, cerebrovascular disease and diabetes. The role of public health agencies, for profit and non-profit entities in research, education, and risk reduction activities also are covered.

PUBH 5455. Health Education. (3 Credits)

Methods for planning, presenting, and evaluating health education programs in communities, schools and worksites. Includes use of the Precede Model, setting of goals and objectives, behavior modification theory, group processes, teaching techniques and activities for developing and presenting workshops or courses.

PUBH 5460. Health and Human Rights. (3 Credits)

Explores the many ways in which human health and well-being are related to human rights. Human rights are a field of international law which includes major treaties, treaty bodies, and adjudicatory mechanisms. This course will review the ways in which human rights instruments and jurisprudence have addressed health and issues related to health. Students will also study a wide range of substantive public health issues that have a human rights dimension, and consider the ways that human rights are used as advocacy tools to improve the structural environment that shapes the public's health.

PUBH 5462. International Health. (3 Credits)

Examines primary health care as a model suited to the health needs of developing nations. Provides a broader understanding of the genesis of illness in developing countries and analyzes the kind of care required to have an impact on these illnesses.

PUBH 5463. Comparative Health Systems. (3 Credits)

An analysis of national health systems in relation to their socio-economic, political, cultural, and epidemiologic contexts. The examination of alternative approaches to organizing scarce health care resources serves as an integrating theme.

PUBH 5465. Occupational Health. (3 Credits)

Recognition and prevention of occupational disease and injuries, including social and political aspects and policy issues such as OSHA and Workers' Compensation laws. Overview of some of the major occupational disease issues. Approaches of industrial hygiene, ergonomics, and occupational epidemiology to understanding and preventing occupational health hazards.

PUBH 5468. Occupational and Environmental Epidemiology. (3 Credits)

Topics include the history of occupational epidemiology, causal models, occupational exposure classification systems, environmental epidemiology, cohort mortality studies, cross-sectional surveys, case-control studies, ecologic studies, and statistical and methodological issues in research design and their solutions.

PUBH 5475. Public Health and Policy in an Aging Society. (3 Credits)

Examines the demographics of aging; organization, financing and delivery of health services for older adults; formal and informal caregiving; retirement and housing policy; and end of life care. Policy and ethical aspects of these topics are explored. Research-oriented, integrating empirical evidence to illustrate central concepts. Familiarity with basic principles of research design, including ability to critically read and synthesize scientific literature, is important.

PUBH 5477. Food, Health and Politics. (3 Credits)

Comprehensive overview of the factors that influence how our food is grown; what foods are available, affordable, and advertised; and the ensuing public health implications. Examines the history of food production in America, the development of public and private food assistance programs, the fast food movement, and food marketing. Students will explore the political, social, economic and environmental factors that impact food availability and consumption, and discuss the implications of these factors on health outcomes, such as obesity, hunger, chronic diseases, and health disparities.

PUBH 5478. Epidemiology of Substance Use Disorders and Psychiatric Co-Morbidities. (3 Credits)

Comprehensive survey of epidemiological research methods as they apply to substance use disorders and related psychiatric co-morbidities. Review of epidemiological research on the prevalence of the major substance use disorders and discussion of what is known about the etiology, treatment and prevention of these disorders. Incorporates recent advances in social and psychiatric epidemiology as well as health disparities attributable to sex/gender and race/ethnicity. Intended for, but not limited to, matriculated MPH students, public health professionals, health care providers, and the mental health and addiction workforce.

PUBH 5479. Alcohol and Drug Policy Research. (3 Credits)

Policymakers and government officials are increasingly seeking answers to practical questions about the impact of policies and programs on the health of the population, as well as on crime rates, traffic accidents and harm to others. Discussion of the measures, methods and research designs used to investigate alcohol and drug policy issues, including prevention science. Intended for, but not limited to, matriculated MPH students, public health professionals, health care providers, and the mental health and addiction workforce.

PUBH 5480. Clinical and Social Service Systems Research in Alcohol and Addiction Science. (3 Credits)

Focus on how to conduct clinical and health services research on treatment and early intervention services and how to critically evaluate research evidence. Assessment procedures, research designs, sampling techniques, and mediators and moderators of treatment effects at both the individual and systems levels of analysis. Intended for, but not limited to, matriculated MPH students, public health professionals, health care providers, and the mental health and addiction workforce. It is recommended that students have completed (or are in process of completing) coursework in statistics, epidemiology and/ or research methods.

PUBH 5481. Research Careers and the Responsible Conduct of Research in Alcohol and Addiction Science. (3 Credits)

Designed to achieve three objectives: 1) Teach students about the responsible conduct of research and ethical research practices; 2) Provide guidance on how to develop a sound research proposal by guiding students through the public and private grant writing process; and 3) Review career options and employment opportunities in addiction science.

Enrollment Requirements: Two of PUBH 5478, 5479, and 5480, one of which may be taken concurrently, or instructor consent.

PUBH 5495. Independent Study in Public Health. (1-9 Credits)

An individual course for those wishing to pursue special topics in the public health sciences under faculty supervision.

May be repeated for a total of 15 credits

PUBH 5497. Graduate Seminar in Public Health. (1-6 Credits)

May be repeated for a total of 36 credits

PUBH 5498. Field Experience in Public Health Systems. (3-9 Credits)

Under direction by field preceptors, students will participate in an intensive service-learning experience wherein they will examine a timely public health issue from the perspective of health indicators/disease surveillance; policy development; planning, implementation, or evaluation of public health services; essential public health functions; and operational issues of a large complex public health agency/organization.

May be repeated for a total of 9 credits

PUBH 5499. Capstone Project in Public Health. (3-6 Credits)**PUBH 5501. Foundations of Public Health and Disability. (3 Credits)**

Introductory survey of the ways in which disability, both developmental and acquired, is affected by, and interacts with, public health policy and practice. Students will have a foundational understanding of a comprehensive set of issues of both acquired and developmental disability as related to the core elements of public health as framed by the 10 Essential Public Health Services.

Enrollment Requirements: Open only to Disability Studies in Public Health certificate students, others by instructor consent.

PUBH 5502. Epidemiology of Disability. (3 Credits)

Introduces epidemiologic research design and delves deeply into epidemiology as it applies to monitoring the health status of people with disabilities, diagnosing and investigating health problems, evaluating personal and population-based interventions, and conduct of research as uniquely affecting and affected by disability. Critically examines sources of public health and epidemiologic data that exist.

Enrollment Requirements: PUBH 5501; open only Disability Studies in Public Health certificate students, others by instructor consent.

PUBH 5503. Disability Law, Policy, Ethics, and Advocacy. (3 Credits)

Introduction to policy and law affecting people with disabilities and public health approaches to meeting their individual needs as well as the needs of broader populations. Federal disability laws are reviewed in terms of both their implications and the implications of public health ethics on people with disabilities. Reviews the role courts have played in further shaping disability policy and the influence of public health ethics and the disability rights movement on decision-making in public health. Policy, legal and advocacy implications for public health at the international level, and essential tools for enforcing laws and regulations that protect health and ensure safety and for developing new policies and plans that support individual and community health efforts inclusive of people with disabilities.

Enrollment Requirements: PUBH 5501; open only Disability Studies in Public Health certificate students, others by instructor consent.

PUBH 5504. Public Health Interventions in Disability. (3 Credits)

Final course in the Disability Studies in Public Health Certificate. Aligns with the 10 Essential Public Health Services. Critically examines public health systems and programs across the lifespan available to people with disabilities that impact health. Extends on foundational principles that are evidence-based and driven by epidemiologic studies of disability within the context of existing laws and policies.

Enrollment Requirements: PUBH 5501, 5502, and 5503; open only Disability Studies in Public Health certificate students, others by instructor consent.

PUBH 6495. Independent Study of Special Topics in Advanced Public Health Sciences. (1-9 Credits)

A doctoral-level independent study course for Ph.D. students who wish to pursue special topics in advanced public health sciences under faculty supervision.

PUBH 6496. Public Health Doctoral Seminar: Scholarship and Professional Development. (3 Credits)

This seminar is a comprehensive survey course exposing pre-candidate doctoral students to a number of advanced methodological topics in public health research and practice as well as ethical conduct in research (e.g., authorship criteria) and career considerations (e.g., range of employment opportunities, grant-writing process, pedagogical theory and practices). In addition to class lectures, students will gain experience in presenting research ideas for critique by faculty and fellow students. Specifically, the term project will be a longitudinal exercise to develop a Specific Aims Page or an outline for a manuscript; both augmented with preliminary data. At the end of the semester, students will present a 15-20 minute talk on their project to the full Public Health program of students, faculty and staff. Each class session will be split between content delivered by faculty and weekly progress reports on the term projects, with slightly more time allocated for discussion of the latter. In addition to topical material presented by the Co-Instructors, guest faculty periodically will present information about their research, career paths, etc.

Enrollment Requirements: Advanced graduate students in public health with at least 30 credits in coursework toward doctoral degree including Intermediate Epidemiology or Intermediate Biostatistics; familiarity with a software analysis package; instructor consent required.