



MPH Courses as of Fall 2017

All students are required to complete a set of core courses, concentration courses, and professional development courses. The program supports flexible plans of study to address the needs of students pursuing complementary degrees and those who are already in the workforce as practicing professionals. Courses are delivered primarily in-classroom. A few courses are offered on-line.

Core Courses

<i>Course Title</i>	<i>Credit Hours</i>	<i>Instructor</i>	<i>Description</i>
Fundamentals of Public Health PHS 5004	3	Marmagas	Theory, concepts, and practices related to public health; five major topics of public health including health services, epidemiology, social/behavioral science, environmental health and biostatistics; special emphasis placed on history of public health, biomedical basis for public health intervention, public health ethics.
Health Behavior and Health Education PHS 5034	3	Hosig	Social and behavioral theory in public health. Topics include individual health behavior theories; social, cultural, and environmental theories which form the underpinnings of health education practice; ecological perspectives; and health communication.
Epidemiology and Quantitative Methods in Public Health I PHS 5025	3	Bill	Investigation and analysis of dynamics and determinants of disease in communities and populations: philosophy of public health science, ethics, study design, and data analysis.
Epidemiology and Quantitative Methods in Public Health II PHS 5026	3	Bill	Investigation and analysis of dynamics and determinants of disease in communities and populations; constructing survey instruments, establishing power and effect sizes; exploration of databases; methods of outbreak investigation; communication of population health data.



<p>SS: Epidemiology and Quantitative Methods in Public Health Lab PHS 5984</p>	<p>1</p>	<p>Bill</p>	<p>Design, analyze, draw conclusions from, and write about epidemiological and public health research projects. Develop hands-on practice for building the skills needed to conduct epidemiological and public health research and evaluate the research of others.</p>
<p>Environmental Health PHS 5014</p>	<p>3</p>	<p>Gohlke</p>	<p>Exploration of major environmental health concepts and issues, environmental policies and regulations. Topics include world population and pressures on the environment, healthy environment; environmental determinants of public health, including biological, physical and chemical factors; disease vectors and their control; air and water quality; waste management; the built environment, work environments and recreational area; food protection and safety; occupational health; tools for environmental evaluation, planning and safety.</p>
<p>Public Health Administration PHS 5044</p>	<p>3</p>	<p>Redican</p>	<p>This course will focus on relevant and timely public health administration concepts. The major topics covered include health policy, health care planning, health care economics, health law, and managerial functions as they relate to health care and public health settings.</p>
<p>SS: Grantwriting for Public Health PHS 5984</p>	<p>1</p>	<p>Marmagas</p>	<p>Professional preparation for public health practice. Skill building in grant writing. Having successfully completed this course, the student will: Demonstrate an understanding of where to look for grant opportunities; Identify main components of program and research grant applications; Construct research aims or program goals, with the requisite objectives and outcomes, to further the knowledge base and/or improve public health practice; Develop the major components of a grant proposal that proposes an evidence-based research study or program intervention to address the aims/goal/objectives/outcomes.</p>

Professional Preparation Courses

<i>Course Title</i>	<i>Credit Hours</i>	<i>Instructor</i>	<i>Description</i>
MPH Professional Preparation PHS 5934	1	Marmagas	Professional preparation for public health practice and the required field practicum for the Master of Public Health (MPH) degree. Setting of professional goals; exploration of practicum placement opportunities and shadowing experiences; initial selection/preparation of practicum learning contract; skill building in resume writing, interviewing, communications, technical writing, professionalism, leadership.
Practicum in Public Health PHS 5914	6	Marmagas/ Advisor	Public health theories and concepts in a work setting; comprehensive, structured experience requires student to demonstrate professional competencies while working closely with a supervisor in a public health practice setting.
Capstone in Public Health PHS 5924	3	Marmagas/ Advisor	Synthesis of coursework and practicum experience into a final comprehensive product which demonstrates proficiency of the MPH competencies; integrates knowledge and skills acquired in all core classes, specific MPH concentration courses and practicum experience; tests student's ability to effectively analyze a public health problem and develop an intervention toward a solution to the problem.

Concentration Courses

Public Health Education Concentration

Course Title	Credit Hours	Instructor	Description
Principles of Community Health Education PHS 5204	3	Marmagas	Examination of the principles that ground community health education. Topics include history of health and health education, philosophical foundations, theoretical foundations, ethics and health education, health educator roles and responsibilities, settings for health education, agencies associated with health education, the literature of health education, and future trends in health education.
Program Development in Health Education PHS 5214	3	Redican	Theoretical and practice aspects of planning, implementing, and evaluating health education programs. Topics include models used in health education program planning, the planning process, assessing needs, development of mission, goals, and objectives, development of interventions, community organizing, allocation of resources, marketing, and program evaluation.
Program Evaluation PHS 5644	3	Hosig	Methods of conducting program evaluations for prevention and intervention programs that promote public health and human development. Major dimensions of evaluation strategies, including process evaluation, impact assessment, and cost analysis.
Social Epidemiology and Health Inequalities PHS 5254	3	Kaestle	Social determinants of health through the life-course. Relationship of social injustice to public health. Interplay of major social factors such as poverty, race and gender to influence health domestically and globally. Application of social epidemiology to a range of health outcomes. Inform effective solutions to health inequities.

Concentration Courses

Infectious Disease Concentration

Course Title	Credit Hours	Instructor	Description
Principles of Infectious Disease PHS 5334	3	Bertke	Principles of infectious diseases important for local, national, and global public health. Bacterial, viral, fungal, and parasitic pathogens; mechanisms of disease; host immune response to pathogens.
SS: Neglected and Emerging Infectious Diseases PHS 5984	3	Bertke	Promote an understanding of the concept of neglected diseases and their association with poverty and health inequalities, the critical factors for emergence/re-emergence of infectious diseases, and the challenges and implications for disease control, eradication, and response.
Infectious Disease Epidemiology PHS 5314	3	Abbas	Dynamics and determinants of infectious diseases and their assessment on the molecular to population continuum in a systems based approach. Infectious disease transmission mechanisms; population susceptibilities; environmental, social, cultural and economic contributors to infectious disease propagation; detection and surveillance; geographic information systems; epidemiologic study design; and infectious disease modeling.
Infection Control and Prevention PHS 5324	3	Pierson	Assessment, policies, and procedures for control and prevention of infectious diseases in communities and populations. Sources, transmission mode, and local community to international dissemination of infectious disease agents; antimicrobial and chemical resistance; vaccine development, safety, and coverage; community and hospital based needs and interventions; and regulatory frameworks.

Suggested Elective Courses

<i>Course Title</i>	<i>Credit Hours</i>	<i>Description</i>
Public Health Seminar PHS 5834	1	Current topics in public health research, policy and practice, including biostatistics, epidemiology, health policy, environmental health, social and behavioral medicine, infectious diseases, and public health education.
Modeling Infectious Disease PHS 5354	3	Mathematical modeling of infectious diseases in humans and animals. Topics include deterministic susceptibles-infectious-recovered (SIR) and related models, estimation of reproductive number, host heterogeneities, multi-pathogen/multi-host models, spatio-temporal models, stochastic dynamics, and modeling for public health policy.
Health of the Elderly PHS 5714	3	The health needs and problems of the elderly, the implications for those working with the elderly, and possible health care delivery systems.
Comparative Health Systems PHS 5224	3	Comprehensive examination of the structure and function of worldwide healthcare and public health systems. National health services with central funding, social insurance programs, decentralized systems, and private insurance systems.
Sexual Health and Human Rights PHS 5244	3	Sexual and reproductive health from human development, public health, and critical feminist perspectives, with special attention to human rights issues. Sexually transmitted infections; HIV/AIDS; unintended pregnancy; population policies; eugenics; sexual and reproductive rights; positive sexuality, sex education; and health promotion.
Advances in Food Microbiology FST 5604	3	Critical review of current topics in food microbiology. Foodborne pathogens, toxins, analytical methodology, food spoilage, inhibition and destruction of bacteria, standards, and fermentations.
Food Safety and Security FST 5614	3	Identification and prevention of food safety and security hazards that may result in intentional or unintentional contamination. Development and implementation of plans to enhance food safety and security in the processing, distribution, transportation, and retail segments of the food supply chain.

Applied Food Microbiology and Sanitation FST 5624	3	<p>Overview of the causes, transmission, and epidemiology of major environmental, food-, and water-borne diseases in the food industry. Detection, monitoring, and control of important environmental pathogens. Chemical, physical, and biological sanitation to control pathogens in food, water, and the environment.</p>
Adv Epi Food & Water Diseases FST 5634G	4	<p>Overview of the causes, transmission, and epidemiology of major environmental, food, and waterborne diseases. Outbreak and sporadic detection, source tracking, and control of pathogens. Overview of the impact of food-borne outbreaks on regulatory activities at the national and international level.</p>
Advanced Medical Geography GEOG 5074G	3	<p>Geographic patterns of disease and health care at various scales. Ecological, holistic approach to health problems emphasizes interrelationships of population-habitat-culture. Mapping of disease patterns and health services delivery and utilization. Field experience included.</p>
Advanced Modeling with Geographic Information Systems GEOG 5084G	3	<p>Use of automated systems for geographic data collection, digitization, storage, display, modeling and analysis. Basic data flow in GIS modeling applications. Development of proficiency in the use of current GIS software.</p>
Principles of Public Health Nutrition HNFE 5604	3	<p>This course provides knowledge of community assessment, planning, implementation, and evaluation as related to nutrition services in health programs. It presents a conceptual background for viewing dietary as well as social, economic, and environmental factors influencing health and nutritional status of populations.</p>
SS: US Food & Nutrition Policy HNFE 5984	3	
Advanced International Development Planning & Policy UAP 5764G	3	<p>Examination of major development theories and contemporary issues and characteristics of low-income societies (industrialization, urbanization, migration, rural poverty, hunger, foreign trade, and debt) that establish contexts for development planning and policy-making.</p>

<p>Economic Development Planning Topics UAP 5784</p>	<p>1-3</p>	<p>An introduction to local economic development programs. Covers intergovernmental relations, financing techniques, federal and local subsidies, advertising, marketing, public relations, labor market issues, tax considerations, fiscal impact analysis, and land use planning issues.</p>
<p>Introduction to Public and Nonprofit Financial Management UAP 5024</p>	<p>3</p>	<p>Introduction to central concepts in financial management for public and nonprofit organizations. Accounting, financial statements and management reporting, auditing, internal control systems, accountability, and approaches to assessing the financial condition of public and nonprofit entities.</p>
<p>Topics in Natural Resources and Natural Hazards Planning UAP 5214</p>	<p>3</p>	<p>Concepts, theory, and practice of resilience-based, climate-change integrated natural resources management and hazards planning. Effects of land, water, soil, and ecosystem management on quality of life for present and future generations. Natural resources and natural hazards planning process and tools for local communities and policies at state and federal levels.</p>
<p>Nonprofit Organization and Management UAP 5454</p>	<p>3</p>	<p>Examines the nonprofit sector in American society and compares those roles with the roles the sector plays in other advanced democracies as well as in developing countries. Also analyzes the role of important sub sectors within the nation's third sector and explores key management challenges confronting non-profit organization leaders with them. Compares those challenges to those found in nongovernmental organizations in developing nations.</p>
<p>Homeland Security and Terrorist Threat PAPA 5254</p>	<p>3</p>	<p>A multidisciplinary introduction to theory, strategy, decision making, and doctrine of Homeland Security as practiced in the U. S. Describes the threat, nature of current global conflicts in which the U. S. is engaged, America's foreign and domestic policy responses to 9/11, and strategic and operational homeland security functions.</p>
<p>Animal and Plant Biosafety and Biosecurity PPWS 5624</p>	<p>3</p>	<p>Principles, tools, and techniques of disease detection, early warning, and containment of animal and plant pathogens. Regulatory agencies and guidelines used to ensure the biosafety and biosecurity of the US food supply from accidental introductions and potential bioterrorism.</p>

<p>Health Psychology PSYC 5374</p>	<p>3</p>	<p>Theoretical and methodological contributions of the behavioral sciences to problems in the health sciences. Topics include psychosocial factors contributing to health and disease, health promotion, and psychological approaches to the prevention and treatment of physical disabilities.</p>
<p>Sociology of Health SOC 6524</p>	<p>3</p>	<p>Examination of sociological theory and research on how social structures and social processes influence the health of individuals and populations. Emphasis on the health consequences of social inequalities by race, class, and gender; the effects of social contexts, networks, and institutions on health; and issues in health care.</p>