

Public Health Science at USG Course Descriptions

Required Courses

EPIB 300 - Biostatistics for Public Health Practice

An examination of biostatistical concepts and procedures as they relate to con-temporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

EPIB 301 - Epidemiology for Public Health Practice

An examination of the discipline of epidemiology and its application to public health issues and practices, covering current epidemiological concepts and methods.

HLSA 300 - Special Topics in Health: Introduction to Health Policy and Services

This course will explore the interplay between public policy, public health, and health services tracking issues in real time while looking back at precedents and predictions of the past.

HLTH 366 – Social and Behavioral Issues in Public Health

The exploration of how social and behavioral science theories and public health concepts and methods can be applied to both the health-illness experience and community interventions.

KNES 360 - Exercise Physiology for Public Health Science

This course is designed to give a basic understanding of the physiology of the cardiorespiratory, neuromuscular and metabolic systems and how these systems respond to the acute stress of exercise and adapt to regular exercise training.

MIEH 300 - Introduction to Environmental Health

This course will study the human health effects of exposure to chemical, physical, and biological agents in the community, workplace, and home.

MIEH 400 - Introduction to Global Health

Exploration of theoretical frameworks and practical perspectives on issues shaping the global health panorama. Determinants examined through: biological and epidemiological; social, cultural and economic; environmental and geographic; multi-section, legal and institutional perspectives with synopsis of how these issues are addressed by international and community organizations in developing countries.

PHSC 401 - History of Public Health

History of public health in the Western world from antiquity to the present. The influence of public health developments in other parts of the globe. The interaction between Western and non-Western cultures with respect to health issues.

PHSC 415 - Essentials of Public Health Biology: The Cell, The Individual, and Disease

This course presents the basic scientific and biomedical concepts of modern public health problems and explores in depth mechanisms and models of the major categories of disease. The biologic principles presented are foundations to public health disease prevention, control, or management programs.

PHSC 498F - Social, Political, & Ethical Issues in Public Health

The course will allow program students a chance to demonstrate skill and mastery in the five core areas of public health: Biostatistics, Epidemiology, Environmental Health Science, Health Policy and Management, and Social and Behavioral Sciences.

Possible Options and Electives***ANTH429D – Exploring Family History**

In this course, students will learn how to take oral histories from family members, search archival records, and obtain information from historic cemeteries. Kinship patterns, the culture of the family (including foods, holidays, and family lore), and family identity will be discussed. In addition, students will learn how to recognize medical and genetic information in oral histories, archival documents, and even old photographs.

CCJS 498 - Domestic Violence

This course will focus on family violence as it relates to intimate partner violence, child abuse, and elder abuse. Theories of causation will be discussed as well as responses to these types of issues and crimes by the criminal justice system.

EPIB 330 - The Coming Plague

Infectious agents are constantly adapting and breaching our defenses. Factors such as climate change, natural disasters, international, poverty and war create conditions for infectious diseases to spread. This course will examine the role of public health in designing solutions to these threats.

FMSC 341 - Personal & Family Finance

Individual and family financial strategies with emphasis on financial planning, savings, investments, insurance, income taxes, housing, and use of credit. Planning, analyzing, and controlling financial resources to resolve personal/family financial problems and to attain financial security.

FMSC 381 - Poverty, Affluence, & Families

Social, political, cultural and economic factors influencing income and wealth in American families.

FMSC 410 - Maternal, Child & Family Health

This course will introduce students to a variety of maternal, infant, adolescent, and family health issues as well as the barriers faced by women striving to achieve a healthful lifestyle.

HLTH 371 - Fundamentals of Health Communication

This course introduces a variety of skills and methodologies to develop evidence-based health communication campaigns. Other topics include risk communication, policy advocacy, and health literacy.

HLTH 434 - Introduction to Public Health Informatics

Provides an overview of the field of public health informatics and the influence of technology on the public's health and well-being. Emphasizes the application of various technologies and computer/internet applications to support public health research and practice, including strategies to address new and emerging threats.

HLTH471 - Women's Health

The historical, physiological, psychological, and sociological mechanisms which contribute to women's health. Topics will include gynecological concerns and reproductive health; nutrition, exercise; violence; substance use/abuse; and the health of special populations.

MIEH 321 - Syphilis to SARS: Climate Change, Development and Emergence of Infectious Diseases

This course will examine the influences of environmental factors economic development, migration, and land use changes on emergence and reemergence of infectious diseases.

MIEH 480 - Occupational Health

Pre-requisite: MIEH 300

The workplace environment can have an impact on workers' physical and psychological health. In this course, students will learn about methods to anticipate, recognize, evaluate, and control environmental factors or stresses arising in or from the workplace. In addition to instructor-led lectures, guest speakers will be invited to discuss case studies and/or discuss workplace hazards unique to specific populations.

PHSC 402 - Public Health Emergency Preparedness

Course will provide students with an overview of the role of public health in planning, prevention, preparedness, response, and recovery from disasters, both manmade and natural.

PHSC 410 - Public Health Program Planning & Evaluation

Students will become familiar with the dynamics of public health program planning, and the basic process of identifying unmet needs. They will be able to identify different types of program evaluation, including needs assessment, formative research, process evaluation, impact assessment, and cost analysis.

PHSC 412 - Food, Policy, and Public Health

Broad overview of the impact of food and food policy on public health. Course covers topics such as access to food, food systems, influence of food policies on the individual, the cost of food, influences on food selection, food safety risks and responses, nutrition-related health challenges, and a comparison of US food/nutrition issues with those of other nations.

PHSC 425 – Genomics and Public Health

Recent advances in genomic science and biomedical technologies have increased our understanding of the genetic basis of disease and the interplay between genetics and environmental and behavioral factors. This course will provide a solid background in basic genetics and genomic science and highlight the role of public health professionals in translating breakthroughs in this rapidly transforming field into the clinical setting, program planning and policy. Topics covered will include fetal and newborn screening, genetic risk factors for cancer, pharmacogenetics, the role of pathogen genomics in outbreak investigation, and applications of genetic engineering in solving public health issues.

PHSC 491 - Public Health Internship

The Public Health Science internship will enable students to gain practical experience under conditions conducive to educational and professional development. The internship is a time-limited, supervised period of public health professional experience carried out in a related professional organization. Students will be required to submit information to document their progress and experiences.

PHSC 498 - Public Health Advocacy

In this course, students will identify and analyze policy solutions to public health problems and determine advocacy strategies to encourage policy makers to implement the recommended policy solutions. Lectures, class discussion, and exercises, group work and mock advocacy exercises will integrate the principles and practice of public

health advocacy. Guest lecturers from a variety of settings will give students a broad range of perspectives and advocacy experiences.

SPHL498G - Public Health in the City

This course will expose students to the many issues related to city habitation and health. Students will develop a broad understanding of the determinants of urban population health and will be encouraged to think innovatively about solutions to common urban health problems. Students will conduct a health needs assessment and analyze their findings and make recommendations to County officials.

**Please note that not all of these options and electives are available every semester.*