

# PUBLIC HEALTH (PHM)

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## **PHM 101 The History of Public Health 3 sem. hrs.**

The role of public health and governance has fundamentally shaped human societies. In this course, students will learn the role of the state in ensuring favorable public health outcomes. Students will also learn the importance of public health, understand how it provided, and learn how it is practiced. The course is intended to introduce students to the field of public health; it is intended to be broadly accessible to all students and provide a practical understanding of the field.

## **PHM 201 Epidemiology 3 sem. hrs.**

Epidemiology is the branch of medicine that deals with the incidence, distribution, and control of a disease. In this course, students will learn and apply key concepts of epidemiology to multiple domains of public health. Students will learn how to use epidemiology to better understand, characterize, and promote health at a population level. Prerequisites: MATH 221 or BSC 221

## **PHM 202 Health Economics 3 sem. hrs.**

Health Economics is the application of economics to health care in support of the public good. By learning to use various economic theories, student will learn how available resources can be used to help improve the quality of healthcare outcomes. Students will also learn various techniques of economic analysis and understand how healthcare organizations attach a monetary value to particular health states. Finally, students will be introduced to econometrics as it applies to public health. Prerequisite: ECON 204

## **PHM 221 Biostatistics 3 sem. hrs.**

The course represents an introduction to the field of biostatistics and provides a survey of data and data types. Specific topics include tools for describing central tendency and variability in data, methods for performing inference on population means and proportions via sample data, statistical hypothesis testing and its application to group comparisons, issues of power and sample size in study designs, and random sample studies and other study types. Emphasis is on using R software.

## **PHM 301 Health Services 3 sem. hrs.**

Health Services - the means by which healthcare is provided - have a complex history and evolution which has fundamentally shaped their current form. Students will learn the modern history of healthcare in high, middle, and low income countries and explore the evolution of healthcare services from the era of the village doctor to the present day. Students will also learn about the structure and function of modern-day healthcare services, both domestically and abroad, and build the skills needed to evaluate the strengths and weaknesses of particular systems and policies. Lastly, students will examine their ideal version of a health service as it pertains to current world events.

## **PHM 401 Public Health Studies I 3 sem. hrs.**

This course allows students to evaluate the health impact of political decisions. Students will explore current topics in public health (e.g. HIV/AIDS, the obesity epidemic) and look at the impact of US politics on global Public health, especially in developing nations. Emphasis is on the conflict between data and political will that drives Public Health policy decision making. The course outcome is a project to plan a Health Impact Assessment of a current/proposed federal/state policy. Prerequisites: PHM 101 and PHM 221 or MATH 221

## **PHM 402 Public Health Studies II 3 sem. hrs.**

This course provides students with a variety of tools for understanding the impact that disease other Public Health concerns may have on a population. Students will learn how to design effective surveys, analyze geographic data (including required participation in a mapathon), and use qualitative information with the ultimate goal of gaining a better understanding of how events may affect the health of a particular population. Prerequisites: PHM 101 and PHM 221 or MATH 221 and PHM 401