

## **MPH 505 - Epidemiology**

### **3 Credit Hours**

As long as humans have existed on this planet, microbes have coexisted with us, providing health benefits and potentially posing a silent and constant threat. In this introductory course in human microbial disease, students explore the history of epidemiology and how various microbes have impacted our lives, identify the characteristics of various pathogens and infectious agents, explain how diseases spread, and learn about the biological human immune response to foreign pathogens. Students will learn the principles and methods of disease investigation: investigating patterns of illness in populations, identifying infectious microbes by visual assessment, mode of infection, symptoms, treatment, prevention and cure. Types of study designs, how population health for a particular health outcome is measured, and an introduction to special topics in epidemiology are also covered. (Prerequisite: One undergraduate course in Biology, Chemistry, Microbiology, or Mathematics; Exemptions: Students who have earned a BS in Public Health from an accredited university within the previous five years and have completed this course with a grade of B or higher may substitute for an elective or research course of equivalent credit value. Substitutions must be approved by the Program Director/Registrar.)