## BIOL4310: Principles of Epidemiology

Credit Hours: 3 Clock Hours: 45/0/0

This course introduces students to the principle concepts of epidemiology and biostatistics as applied to public health problems and the investigation of infectious and noninfectious diseases. The course focuses on the principles and methods of epidemiologic investigation, appropriate summaries and displays of epidemiological data, and the use of classical statistical approaches to describe the health of populations. Emphasis is on the use of epidemiology in the understanding of etiologic factors, modes of transmission, and pathogenesis. Topics include application of these disciplines in the areas of health services, screening, genetics, and environment policy. The influences of epidemiology and biostatistics on legal and ethical issues and the epidemiological approach to health services evaluation are also discussed.