HLTH 2800 : Fundamentals of Applied Epidemiology and Biostatistics

Introduces basic concepts of epidemiology and biostatistics as applied to public health problems. emphasis placed on principles and methods of epidemiologic investigation, appropriate summaries and display of data, and use of classical statistical approaches to describe the health of populations. Topics include dynamic behavior of disease; usage of rates, ratios and proportions; methods of direct and indirect adjustment, and clinical life table which measures and describes the extent of disease problems. Various epidemiologic study designs for investigating associations between risk factors and disease outcomes are also introduced, culminating with criteria for causal inferences. Application of these disciplines in the areas of health services, screening, genetics, and environment policy are presented. Influence of epidemiology and biostatistics on legal and ethical issues are also discussed. Prerequisites: Eligible to enroll in MATH 1310 and ENGL 1010.

Credits 3.0 **Semester Offered** fall/spring