Minnesota State University Moorhead

HSAD 326: Epidemiology & Introductory Biostatistics

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course will provide students with an understanding of basic concepts and methods of epidemiology and biostatistics. The course covers epidemiological methods and biostatistical procedures, and emphasizes how these concepts can be used to examine disease status and exercise control mechanisms in the field of health services administration. Epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries are discussed. Additionally, students will be introduced to tools and concepts of biostatistics and how these concepts can be applied to epidemiology, the practice of public health and population-based management.

B. COURSE EFFECTIVE DATES: 02/02/2017 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Discuss the history, philosophy, and uses of epidemiology.
2. List the sources of epidemiologic data and define related measures of morbidity and mortality.
3. Define the term 'descriptive epidemiology' and describe the applications of descriptive epidemiology to the health of populations.
4. Identify and explain strengths and weaknesses of epidemiological study designs including sources of bias in these studies.
5. Analyze the application of epidemiology to public health and policy development.
6. Describe applications of epidemiology to outbreak investigation, social and behavioral phenomena, and special topics including work and the environment.
7. Examine distribution of given data and present appropriate statistics for epidemiological study.
8. Explain statistical terms and concepts.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted