COURSE DESCRIPTION:

Prerequisites: MAT 110 or MAT 143
Corequisites: None

This course covers maintenance, compilation, analysis, and presentation of healthcare statistics and research protocols and techniques. Topics include basic statistical principles, indices, databases, registries, vital statistics, descriptive statistics, research protocol monitoring, Institutional Review Board processes, and knowledge-based research techniques. Upon completion, students should be able to apply, interpret, and present healthcare statistics and utilize research techniques to gather and interpret healthcare data. Course Hours per Week: Class, 2. Lab, 2. Semester Hours Credit, 3.

Note: Students must pass all Health Information Technologies (HIT) courses with a C (77% or better) to graduate from the program. No course is considered passed unless a C (77% or better) is obtained.

OUTLINE OF AHIMA KNOWLEDGE CLUSTERS COVERED IN THIS COURSE:

Upon successful completion of this course, the student will be able to:

a. Participate in defining data elements for institution-wide data collection
b. Compute routine institutional statistics
c. Compute and report institutional health care quality indicators
d. Assist in interpretation of data
e. Prepare data for presentation
f. Analyze patient data using QI tools
g. Present and discuss data
h. Perform statistical analysis of patient information
i. Design reports using database report generation
j. Participate in institution-wide committees that rely on medical records
k. Define institution-wide data elements
l. List and define UHDDS elements
m. Define basic statistical terms
n. Apply basic statistical principles
o. Identify the HIT’s role
p. Discuss legal requirements and regulations for birth and death registration
q. Discuss and calculate length of stay data
r. Calculate occupancy percentage
s. Discuss and calculate bed turnover rate data
t. Compute net, gross, fetal, maternal, and infant death rates
u. Compute autopsy rates, and identify medical examiner’s cases
v. Discuss circumstances under which a body must be made available for autopsy
w. Identify raw data and compute nosocomial infection rates
x. Compute cesarean section rates
y. Use quality improvement tools
z. Use database report generation software