## MATH 115: Introduction to Statistics and Probability

Credits: 3

Class Hours: 3 lecture

Prerequisites: "C" or higher in MATH 75X or MATH 82X; or acceptable math placement.

**Description:** This course utilizes basic statistical topics including measures of central tendency and dispersion, classification of variables, sampling techniques, elementary probability, normal and binomial probability distributions, tests of hypothesis, linear regression and correlation in order to solve problems.

Semester Offered: Fall, Spring

Designation:

Foundations (Quantitative Reasoning) — FQ Course Student Learning Outcomes (CSLOs):

- 1. Calculate and interpret descriptive statistics, including the mean, median, mode, and standard deviation of single-variable data and the correlation and regression coefficients of paired-variable data.
- 2. Calculate and interpret probabilities for an event in a probability experiment.
- 3. Construct and interpret point and interval estimates, and apply appropriate techniques to execute and interpret hypothesis tests and effectively communicate procedures and results.