STAT 3610: Probability and Statistics II
3 Credit Hours
Instructor: Jia (Peter) Liu
Course Textbook: Probability and Statistical Inference, Hogg, Tanis, and Zimmerman, 10th edition.
Course Content:
- Description- Calculus-based introduction to probability and statistics with an emphasis on practical problem-solving.
- Prerequisite- STAT 3600
- Class is Required

Course Goals:
- Objectives: To develop the student's knowledge of basic principles and techniques of probability and statistics.
- Program Outcomes: This course relates to two of the department's stated ABET outcomes, a) an ability to apply knowledge of mathematics, science, and engineering; and b) an ability to design and conduct experiments, as well as analyze and interpret data.

Topics to be Covered:
Descriptive Statistics
Order Statistics
Point Estimation
Confidence Intervals
Tests of Statistical Hypothesis with on and two means
Wilcoxon Tests
Statistical Power
Chi-square Distribution
Analysis of Variance (ANOVA)