STATISTICS (STAT)

STAT 2200 Statistical Computing **3 Credits**

Prerequisite: MATH 1121 or MATH 1141 or MATH 1171.

This course provides students with an introduction to computing in a popular statistical programming language such as R. Topics include data structures, reading and storing data, data transformation and manipulation, accessing and using packages, conditionals, loops, functions, graphics and data visualization, and introductory statistical methods for data analysis. No previous programming experience is required.

STAT 2218 Statistics II **3 Credits**

Prerequisites: ECON 3278 or MATH 2217 or PSYC 2810 or PUBH 2217; STAT 2200.

This course is a continuation of Statistics I and covers additional statistical concepts used in the physical sciences, social sciences, business, and health studies. Topics include, but are not limited to, regression analysis (multiple regression, logistic regression, and regression with categorical predictors), analysis of variance (one-way and two-way models), analysis of categorical variables (measures of association, chi-squared tests, odds ratio, and relative risk), and non-parametric tests. One professional statistical package, such as R, will be used throughout the course. Students should have a laptop with the required software installed.