STATISTICS (STAT)

STAT 180 - Introduction to Statistics (3 Credits)
First course in statistical methods. Includes descriptive and inferential techniques and probability, with examples from diverse fields. Topics vary with instructor and may also include sampling methods, regression analysis, and computer applications.

STAT 205 - Selected Topics in Statistics (1-3 Credits)
Prerequisite: Course dependent. Opportunity for additional study of lower-level topics in statistics.

STAT 280 - Statistical Methods (3 Credits)
Prerequisite: STAT 180 or equivalent. Second course in statistical methods. Includes one-way and higher ANOVA, multiple regression, categorical data analysis, and nonparametric methods with examples from diverse fields. Topics vary with instructor and may also include time series and survival analysis.

STAT 320 - Applied Regression Analysis (3 Credits)
Prerequisite: STAT 280. Topics include simple linear regression, multiple linear regression, categorical predictors, model building principles, residual analysis, multicollinearity and other regression problems, robust regression, nonlinear regression, logistic regression, time series and generalized linear models.

STAT 361 - Topics in Statistics (3 Credits)
Prerequisite: Course dependent. Opportunity for additional study of statistical topics

STAT 381 - Probability and Statistical Inference (3 Credits)
Prerequisite: MATH 122 An introduction to probability theory and calculus-based statistics including probability distributions of discrete and continuous random variables, functions of random variables, methods of estimation, and statistical inference. Only in sequence.

STAT 382 - Probability and Statistical Inference (3 Credits)
Prerequisite: STAT 381. An introduction to probability theory and calculus-based statistics including probability distributions of discrete and continuous random variables, functions of random variables, methods of estimation, and statistical inference. Only in sequence.

STAT 420 - Applied Multivariate Statistics (3 Credits)
Prerequisite: STAT 280. Topics include visualization techniques, principal component analysis, factor analysis, multidimensional scaling, canonical correlation analysis, correspondence analysis, cluster analysis and structural equation models.

STAT 461 - Topics in Statistics (3 Credits)
Prerequisite: Course dependent. Topics such as time series analysis, computational statistics, design of experiments, probability theory, stochastic processes, and queuing theory. May be taken up to three times for credit.

STAT 491 - Directed Study (1-3 Credits)
Prerequisite: Departmental permission. Individual study beyond the scope of normal course offerings, done under the direction of a faculty member. May lead to graduation with Honors in Mathematics.

STAT 492 - Directed Study (1,3 Credits)
Prerequisite: Departmental permission. Individual study beyond the scope of normal course offerings, done under the direction of a faculty member. May lead to graduation with Honors in Mathematics.

STAT 499 - Internship (1-12 Credits)
Supervised off-campus experience, developed in consultation with the department. Does not count in the major program or minors.