## **STATISTICS (STAT)**

## STAT 549 Statistical Methods I 3 Hours

Principles of applied statistical research. Elements of data collection and experimental design. Parametric and nonparametric methods for analyzing interval, ordinal and categorical data, including confidence intervals and hypothesis testing, single factor ANOVA, simple and multiple linear regression and correlation. Emphasis will be placed on analyzing real data.

**Prerequisite(s):** permission of instructor Recent Term(s) Offered: fall 2022; fall 2024

## STAT 550 Statistical Methods II 3 Hours

Continuation of STAT 549. Topics include multiple linear regression, generalized linear model, two-way ANOVA and more general factorial design, block and nested design, mixed and random effect models, analysis of covariance. Emphasis on analyzing real data using statistical software packages, such as SAS, SPSS, or R.

**Prerequisite(s)**: STAT 549 with a minimum grade of B or permission of instructor

Recent Term(s) Offered: None