## STATISTICS (STAT)

## STAT 501 Statistical Computing 3 Credit Hour(s)

An introduction to statistical computing and developing programming skills to perform statistical analyses.

Offered: Online

STAT 502 Regression Analysis and Modeling 3 Credit Hour(s)

Online Prerequisite: STAT 501

Linear and multiple regression analysis and modeling.

Offered: Online

STAT 510 Experimental Design 3 Credit Hour(s)

Online Prerequisite: STAT 501

Introduction to experimental designs and analysis of data from

experiments.

Offered: Online

STAT 513 Bayesian Statistics 3 Credit Hour(s)

Online Prerequisite: STAT 501

Introductory topics in Bayesian inference.

Offered: Online

STAT 514 Nonparametric Statistics 3 Credit Hour(s)

Online Prerequisite: STAT 501

This course provides an overview of nonparametric statistics.

Offered: Online

## STAT 541 Probability 3 Credit Hour(s)

The course introduces the basic concepts and methods of probability. Topics include: set notation and operations, properties of probability, expectation, and discrete and continuous probability distributions of a single random variable.

Offered: Online

STAT 542 Mathematical Statistics 3 Credit Hour(s)

Online Prerequisite: STAT 541

A course that delves into the theoretical foundations and advanced

methodologies underpinning modern statistical inference.

Offered: Online

STAT 543 Advanced Statistical Methods 3 Credit Hour(s)

Online Prerequisite: STAT 542

This course covers advanced inferential statistical topics.

Offered: Online

STAT 545 Exploratory Data Analysis 3 Credit Hour(s)

Online Prerequisite: STAT 501

Focuses on analyzing trends, patterns, and relationships in data sets

using statistical and visualization methods.

Offered: Online

STAT 550 Statistical Consulting Practicum 3 Credit Hour(s)

Online Prerequisite: STAT 501 and STAT 543

An advanced-level course designed to provide students with hands-on

experience in real-world statistical consulting scenarios.

Offered: Online