Statistics Courses

STAT 2610 Applied Statistics (4 credits)
A nontheoretical introduction to statistics with an emphasis on applications in a variety of disciplines. Topics include measures of central tendency, position and dispersion; basic probability; hypothesis testing; estimation; analysis of variance; linear correlation and regression; nonparametric statistics. Prerequisite: Three years of high school mathematics (including two years of algebra) and an appropriate score on the Mathematics Placement Test, or completion of MATH 1170 or higher. Liberal Education Goal Area 4.

STAT 3610 Time Series Analysis (3 credits)
Linear time models, seasonal models, stationary models, moving average, autoregressive and ARIMA models, model identification, confidence intervals and testing, forecasting and error analysis. Prerequisites: (MATH 2472 and STAT 2610) or STAT 3631. (Might not be offered every year.)

STAT 3631 Probability and Statistics I (4 credits)
Probability of finite sample spaces, discrete and continuous probability distributions, exploratory data analysis, statistical models. Prerequisites: MATH 2472.

STAT 3632 Probability and Statistics II (3 credits)
Multivariable distributions, sampling distribution theory, estimation, hypothesis testing, regression and correlation. Prerequisites: MATH 2480 and STAT 3631. (Might not be offered every year.)

STAT 3650 Probability and Statistics for Secondary Teachers (4 credits)
Topics include descriptive statistics and graphical representations, basic probability and commonly encountered distributions, random variables, expectation and variance, sampling theory, and inferential statistics including univariate and bivariate data. Calculus is employed in the development of these concepts. Technology is used extensively to motivate and explain concepts and techniques. The course emphasizes and models exercises and pedagogy appropriate for the secondary school classroom. Prerequisite: MATH 2471.

STAT 3660 Statistics for the Health Sciences (3 credits)
Introduction to descriptive and inferential statistics in the context of the health sciences. Covers data types, methods for summarizing and displaying data, measures of central tendency and variability, hypothesis testing including the analysis of variance and nonparametric techniques, correlation and regression. Students learn to use the statistical software package SPSS for data analysis. Prerequisite: MATH 1170 or consent of instructor.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS