



# Statistics

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## Statistics Courses

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### **STAT 5610 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.

### **STAT 5631 Probability and Statistics I (4 credits)**

Probability of finite sample spaces, discrete and continuous probability distributions, exploratory data analysis, statistical models. Prerequisite: Consent of instructor.

### **STAT 5632 Probability and Statistics II (3 credits)**

Multivariable distributions, sampling distribution theory, estimation, hypothesis testing, regression and correlation. Prerequisite: STAT 5631.

### **STAT 5650 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.

### **STAT 5660 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.

## 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