Statistics 2560 is a continuation of Statistics 2550 and it is one of the prerequisites for every 3000-level statistics course. More advanced statistical techniques will be introduced.

Widely used statistical methods from one- and two-sample tests, analysis of variance, multiple linear regression to non-parametric tests will be studied in detail.

The purpose of this course is to provide students with general knowledge of basic statistical methods and with capability to make proper interpretation of statistical analysis.

Text. In recent years, the text for this course has been *Probability and Statistics for Engineering and the Sciences* by Jay L. Devore.

Marks. It is typical to assign 50% of the final grade to a final exam, 20% to a midterm, 20% to weekly quizzes and 10% to weekly assignments.

Calendar description. **2560 Further Statistics for Science Students** (formerly STAT 2511) covers estimation and hypothesis testing in the two-sample and paired sample cases, one way and two way analysis of variance, simple and multiple linear regression, chi-square tests, non-parametric tests including sign test, Wilcoxon signed rank test and Wilcoxon rank test.

Prerequisite: Statistics 2500 (with Mathematics 1000 or 1081) or Statistics 2550.

Note: Credit can be obtained for only one of Statistics 2501, 2560, the former 2511, Psychology 2911, 2950, and the former 2901. Statistical computer packages will be used in the laboratory, but no prior computing experienced is assumed.

Offered. Winter.