

STATISTICS 4590
STATISTICAL ANALYSIS OF DATA

In this course, we consider the following sorts of problems:

1. contingency analysis for count data;
2. analysis of univariate data when collected in time sequence;
3. ANOVA (one and two ways) and some MANOVA problems;
4. non-parametric tests.

Text. There is no textbook for this course. Problems from various disciplines are discussed. The software package SPSS is used.

Marks. In a recent semester, there were five assignments counting 20% of the final grade and two take-home projects each counting 40%.

Calendar description. **4590 Statistical Analysis of Data I** examines the statistical analysis of real life univariate data using computational and statistical methods including descriptive statistics, chi-square tests, non-parametric tests, analysis of variance, linear, logistic and log-linear regressions. Other statistical techniques such as integrated autoregressive moving average modelling and forecasting or quality control methods may be introduced depending on the nature of the data. There will be one 90 minute laboratory period each week.

Prerequisite: One of Statistics 3411, 3520 or 3521.

Offered: *Contact the Deputy Head (Statistics) in the Department of Mathematics and Statistics for information regarding the scheduling of this course.*