STATISTICAL INFERENCE III LABORATORY STS494

Aims & Learning Objectives:

Aims: Introduce classical estimation and hypothesis testing-testing principle

Objective: Ability to perform standard estimation procedures and tests on normal data. Ability to carry out goodness-of –fit tests, analysis of contingency tables, and carry out non-parametric tests. Ability to use R to calculate estimates, carry out hypothesis tests and compute confidence intervals.

Content:

Using R package to analyse and interpretation of data in general linear hypothesis, analysis of linear models, hypothesis extension of uniparameter result to multiparameter situation and other distributions.

Some useful books

We won't follow a book as such but useful references include:

1. J.A. Rice, Mathematical Statistics and Data Analysis, Third Edition, 2007.
2. L.J. Bain and Engelhardt, M., Introduction to probability and mathematical statistics, 1992.
3. C. Chatfield, Statistics for technology: a course in applied statistics, Third Edition, 1983.