

STAT 545A – DATA ANALYSIS
2011/2012 - Term 1

Term 1, 2010/11 (6.5 weeks: 7 Sept.– 21 Oct. 2011, 1.5 credits)

DESCRIPTION. This course has three intertwined goals;

- Expose students to state-of-the-art R/S-Plus software for data analysis and statistical research.
- Expose students to datasets and scientific problems that exemplify modern statistical practice.
- Expose students to statistical methods ranging from core techniques (linear models, generalized linear models) to more modern and flexible techniques (methods which are robust to outliers, classification and regression trees, clustering techniques, curve-fitting techniques, and others).

Knowledge and skills from this course may be useful to first-year graduate students as preparation for summer Research Assistant work.

AUDIENCE. This course is open to any graduate student in the Department of Statistics. Graduate students from other departments are welcome after consultation and permission of the instructor.

TEXTBOOK. Venables and Ripley (2002). *Modern Applied Statistics with S-PLUS*, fourth edition. Springer.

The listed textbook is a suggested reference, but students are not required to buy. We will use eBooks available through the UBC site licenses.

PREREQUISITE. Sufficient statistical background or permission of the instructor.