



STAT 890

Selected Topics: Longitudinal Data Analysis

Spring 2009
Day Course

Students requiring accommodations as a result of disability, must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Instructor: [Dr. Joan Hu](#)

Textbook:

Analysis of Longitudinal Data, 2nd ed., by Peter Diggle, Patrick Heagerty, Kung-Yee Liang and Scott Zeger, Publisher: Oxford University press

Course Outline:

To introduce students to statistical models and methods for the analysis of longitudinal data, i.e. data collected repeatedly on individuals (human, animals, plants, sample, etc.) over time (or other conditions).

Course Topics:

1. Preliminaries
2. Classical methods for normally distributed balanced repeated measurements
3. Methods for normally distributed, unbalanced repeated measurements
4. Methods for non-normally distributed, unbalanced data
5. Advanced topics (quick overview)

Grading Scheme:

Homework Assignments: 20%

2 Tests: 25% each

Data Analysis Project (“closed” take home) 30%

Students should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester. Students are reminded that Academic Honesty is a cornerstone of the acquisition of knowledge. Scholarly integrity is required of all members of the University. Please consult the General Guidelines of the calendar for more details.

Revised January 2009