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

Prerequisite:
STAT 302 or STAT 305 or STAT 650 or permission of instructor. Open only to graduate students in departments other than Statistics & Actuarial Science. Students with credit for STAT 402 or 602 may not take this course for further credit.

Textbook:
An Introduction to Categorical Data Analysis, 2nd ed., by: Alan Agresti. Publisher: Wiley.

Calendar Description:
Introduction to standard methodology for analyzing categorical data including chi-squared tests for two- and multi-way contingency tables, logistic regression, and loglinear (Poisson) regression.

Outline:

This course introduces students to the most important methods for analyzing categorical data. The focus of the course is twofold: classical methods in categorical data analysis, such as chi-squared tests, and logistic and log-linear (Poisson) regression analysis.

1. Introduction and review
2. Two-way contingency table
3. Three-way contingency table
4. Logistic regression
5. Loglinear regression
6. Further topics, including goodness-of-fit, model selection, over-dispersion and generalized linear models.

Note: This course is taught in parallel with STAT 475. Students in STAT 675 will normally be required to submit a project related to their specialty.

Grading Scheme (subject to change):

Assignments – 10%
Project – 20%
Midterm – 39%
Final – 31%
Note: Graduate students in STAT 675 will be graded separately from students in STAT 475 using standards appropriate to graduate level course work.

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. Students are encouraged to review policies pertaining to academic integrity available on Student Services webpage at http://students.sfu.ca/academicintegrity.html

Revised October 16, 2013