

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 285 or STAT 302 or STAT 305 or equivalent. Students with credit for the former 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. **Quantitative** 

#### **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 loglinear (Poisson) regression techniques.

- 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.

## **Grading Scheme:**

Assignments – 18% Midterms – 30% Final – 52% *Grading is subject to change.* 

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

# Students looking for a Tutor should send an email to <u>stat@sfu.ca</u> with "Tutor Request" in the subject line. Please only include information that you would like forwarded to our tutors mailing list.

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