SPRING 2016 - STAT 475 D100

APPLIED DISCRETE DATA ANALYSIS (3)

Class Number: 2944   Delivery Method: In Person

COURSE TIMES + LOCATION:

Mo 12:30 PM – 2:20 PM
AQ 3153, Burnaby

We 12:30 PM – 1:20 PM
AQ 3153, Burnaby

EXAM TIMES + LOCATION:

Apr 21, 2016
8:30 AM – 11:30 AM
AQ 3181, Burnaby

INSTRUCTOR:

Thomas Loughin
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778-782-8037
Office: SC-K10549

PREREQUISITES:

STAT 302 or STAT 305 or STAT 350.

Description

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. Students with credit for the former STAT 402 or 602 may not take this course for further credit. Quantitative.

COURSE DETAILS:

Course Outline:

This course introduces students to the most important methods for analyzing categorical data. The primary focus of the course is on regression models for counts and proportions. It will also cover classical methods in categorical data analysis, such as inference for one or two proportions and chi-squared tests.

1. Introduction and review: likelihood methods and R
2. Analysis with binary variables
3. Analysis with multicategory variables
4. Analysis with count response
5. Model selection and evaluation
6. Further topics

*The first two weeks of tutorials will be in the following computing labs:

D102 - Jan 18th and 25th - AQ3145

D103 - Jan 13th and 20th - AQ3145
D104 - Jan 13th and 20th - AQ3148.1
D105 - Jan 13th and 20th - AQ3145

Grading

Assignments	15%
Midterms	40%
Final	45%

NOTES:

All grading is subject to change.

Materials

REQUIRED READING:

Required Text:

Analysis of Categorical Data with R., **by: Christopher R. Bilder and Thomas M. Loughin. Publisher: CRC Press**

DEPARTMENT UNDERGRADUATE NOTES:

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

Tutor Requests:
Students looking for a Tutor should visit http://www.stat.sfu.ca/teaching/need-a-tutor-.html. We accept no responsibility for the consequences of any actions taken related to tutors.