

SPRING 2019 - STAT 475 D100

APPLIED DISCRETE DATA ANALYSIS (3)*Class Number: 3968 Delivery Method: In Person***COURSE TIMES + LOCATION:**

Tu 10:30 AM – 11:20 AM
SSCC 9000, Burnaby

Th 9:30 AM – 11:20 AM
WMC 3260, Burnaby

EXAM TIMES + LOCATION:

Apr 14, 2019
12:00 PM – 3:00 PM
WMC 3520, Burnaby

INSTRUCTOR:

Thomas Loughin
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Office: SC-K10549

PREREQUISITES:

STAT 302 or STAT 305 or STAT 350 or BUEC 333 or equivalent.

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

Grading

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| Assignments | 10% |
| Midterms | 40% |
| Final Exam | 50% |

NOTES:

Above 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 Disabilities:

Students requiring accommodations as a result of disability must contact the Centre for Accessible Learning 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.

REGISTRAR NOTES:

SFU's Academic Integrity web site <http://www.sfu.ca/students/academicintegrity.html> is filled with information on what is meant by academic dishonesty, where you can find resources to help with your studies and the consequences of cheating. Check out the site for more information and videos that help explain the issues in plain English.

Each student is responsible for his or her conduct as it affects the University community. Academic dishonesty, in whatever form, is ultimately destructive of the values of the University. Furthermore, it is unfair and discouraging to the majority of students who pursue their studies honestly. Scholarly integrity is required of all members of the University. <http://www.sfu.ca/policies/gazette/student/s10-01.html>

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