

PSYC 5417 - CATEGORICAL DATA ANALYSIS

Course	PSYC 5417 Categorical Data Analysis
Instructor	Dr. Yan Liu
Term	Winter 2024-2025
Course Delivery	In-person
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Office Location	B546 Loeb
Office Hours	TBA

COURSE DESCRIPTION/INSTRUCTOR'S STATEMENT

This course is designed to provide students with an understanding of the statistical methods used today by leading researchers for analyzing categorical and limited dependent variables. The course will also provide practical experiences that you can apply to your future research. During class, you will have many opportunities to work as a group and engage in hands-on data analysis activities. Topics will include contingency tables, chi-square test, logistic regression (binary, ordinal, and multinomial), Poisson and negative binomial regression for categorical data. You will also learn how to deal with zero-inflated distributions. The skills that you will have gained by the end of the course include:

- Have a basic understanding of advanced statistical methods
- Be able to visualize data relationships
- Conduct statistical analyses using R and/or other software programs
- Apply statistical methods and interpret the results

EVALUATION

Students will be evaluated based on quizzes, one presentation, assignments, and a term paper.

TEXTBOOKS

Agresti, A. (2019). An introduction to categorical data analysis. (3rd Ed.). Hoboken, NJ: John Wiley & Sons. ISBN: 978-1-119-40526-9

Supplementary readings will also be provided.