## Statistical Methods for Discrete Response, Time Series, and Panel Data: Live ession 4

Professor Jeffrey Yau

## Main Topics Covered in Lecture 4:

- Multinomial probability distribution
- $\bullet$  IJ contingency tables and inference using contingency tables
- The notion of independence
- Nominal response models
- Odds ratios in the context of nominal response models
- Ordinal logistical regression model
- Estimation and statistical inference of these models

## Required Readings:

**BL2015:** Christopher R. Bilder and Thomas M. Loughin. Analysis of Categorical Data with R. CRC Press. 2015.

• Ch.3 (Skip Sections 3.4.3, 3.5)

## Agenda of Week 4 Live Session

- 1. Quiz 3
- 2. An Application of Multinomial Logistic Regressoin: Modeling Voters' Party Evidence from the 2016 American National Election Survey