

Economics 8828

Fall 2019

Prof. Xiaodong Liu

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Location: ECON 5

Meeting Times: MW 1:30-2:45

Office Hours: MW 12:30-1:30

Course Description:

This is a second-year graduate econometrics course that focuses on the analysis of individual-level data. It covers econometric methods based on the general linear and nonlinear models for cross-section data. The first half of this course studies the M-estimators and their application in discrete choice models and multivariate models. The second half of the course introduces spatial and social network models.

Prerequisite: Econ 7828.

Text: Davidson, R. and J. G. Mackinnon, 2004, *Econometric Theory and Methods*.

Assessment:

There will be a midterm exam, a final exam, and periodic problem sets.

3. Discrete and Limited Dependent Variables
 - a. Binary response models
 - b. Models for unordered multiple choices
 - c. Models for count data
 - d. Models for censored and truncated data
 - e. Sample selectivity
 - f. Duration models
4. Multivariate Models
 - a. Seemingly unrelated linear regressions
 - b. Systems of nonlinear regressions
 - c. Linear simultaneous equations models
 - d. Nonlinear simultaneous equations models
5. Spatial and Social Network Models
 - a. Spatial autoregressive models
 - b. IV, GMM and ML estimation
 - c. Social interaction models
 - d. Network formation models

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the semester so that I may make appropriate changes to my records. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#).

Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty.

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