

Prof. Xiaodong Liu

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Location: Econ 119  
Meeting Times: TTh 9:30-10:45  
Office Hours: TTh 12:30-2:00

**Course Description:**

This is the second course of the first-year econometrics sequence. Built on the fundamental concepts in probability and statistics covered in ECON 7818, this course introduces linear and nonlinear regression models, and methods for estimation and inference.

**Prerequisite:** ECON 7818 (or equivalent).

**Text:**

Davidson, R. and J. G. Mackinnon, 2004, *Econometric Theory and Methods*, Oxford University Press.

**Other Reference Books:**

1. Davidson, J., 2000, *Econometric Theory*, Blackwell Publishing.
2. Cameron, A. C. and P. K. Trivedi, 2005, *Microeconometrics*, Cambridge University Press.

**Assessment:**

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

1. Homework assignments (20%)
2. Midterm examination (40%)
3. Final Examination (40%)

**Tentative Course Outline:**

1. Linear Regression Models
  - a. Specification of regression models
  - b. Method of moments estimation
  - c. Geometry of vector spaces and OLS
  - d. The Frisch-Waugh-Lovell Theorem
  - e. Influential observations

2.

**University Policies:**

## Classroom Behavior

Students and faculty are responsible for maintaining an appropriate learning environment

## Preferred Student Names and Pronouns

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

## 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 Honor Code may include but are not limited to: plagiarism (including use of paper writing services or technology [such as essay bots]), 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.

All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: [honor@colorado.edu](mailto:honor@colorado.edu), 303-492-5550. Students found responsible for violating the [Honor Code](#)

