

Prof. Xiaodong Liu

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Location: ECON 119  
Meeting Times: TTH 2:00-3:15  
Office Hours: TTH 11:00-12:30

**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
2. Statistical Properties of Ordinary Least Squares
3. Hypothesis Testing and Confidence Intervals
4. Generalized Least Squares
5. Instrumental Variables Estimation
6. The Generalized Method of Moments
7. The Method of Maximum Likelihood
8. Nonlinear Regression
9. Discrete and Limited Dependent Variables
10. Simultaneous-Equation Models

**University Policies:**

University policies regarding classroom behavior are available at <http://www.colorado.edu/policies/classbehavior.html> and at [http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student\\_code](http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code)

Information regarding the University Honor Code is available at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode>. The Honor Code Council can be contacted by email at [honor@colorado.edu](mailto:honor@colorado.edu) or by telephone at 303-725-2273.

University policies regarding disabilities are available at <http://www.colorado.edu/disabilityservices>. Disability Services can be contacted by telephone at 303-492-8671, or in person at Willard 322.

University policies regarding religious practice are available at [http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html).

University policies regarding Sexual Harassment and Amorous Relationships are available at <http://www.colorado.edu/odh/>. The Office of Discrimination and Harassment can be reached by telephone at 303-492-2127. The Office of Judicial Affairs can be reached at 303-492-5550.