

ECONOMICS 7632: MICROECONOMETRICS (Tentative)

Instructor: Carter Hill
Office: 2127 CEBA
Phone: 578-1490
Office Hours: TBA
email: eohill@lsu.edu

Course Grading: Course grades will be assigned on the basis of

- a take home midterm (30%; **Distributed February 27. Due March 2.**),
- a comprehensive final exam (40%) **May 5, 7:30-9:30 a.m.**
- a paper (30%, see requirements below) Topic selection and a one page outline, including selection of the application, is due **March 23**. Final paper is due **April 24**. No late papers will be accepted.

Required Texts:

- Jeffrey Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, MIT Press, 2002. See Errata, solutions and data at <http://www.msu.edu/~ec/faculty/wooldridge/book2.htm>.
- Bill Greene (2008) *Econometric Analysis*, Sixth edition, Prentice-Hall. See <http://pages.stern.nyu.edu/~wgreene/Text/econometricanalysis.htm>
- **Strongly recommended:** Badi H. Baltagi, *Econometric Analysis of Panel Data, 4rd Ed.*, John Wiley & Sons, 2008. Data at www.wileyurope.com/college/baltagi

Other Useful References

- Adkins and Hill, *Using Stata for Principles of Econometrics, 3e*, Wiley, 2008. See www.principlesofeconometrics.com
- Cameron and Trivedi, *Microeconometrics*, Cambridge University Press, 2005. Web site for data and stata code <http://cameron.econ.ucdavis.edu/mmabook/mma.html>
- Cameron and Trivedi, *Regression Analysis of Count Data*, Cambridge, 1998. Data and programs at <http://cameron.econ.ucdavis.edu/racd/count.html>
- Franses and Paap, *Qualitative Models in Marketing Research*, Cambridge, 2001. Data at <http://people.few.eur.nl/paap/book.htm>
- Frees, *Longitudinal and Panel Data: Analysis and Applications in the Social Sciences*, Cambridge, 2004.
- Greenberg, *Introduction to Bayesian Analysis*, Cambridge, 2008.
- Koop, *Bayesian Analysis*, Wiley, 2003. Data and programs at <http://www.wiley.com/legacy/wileychi/koopbayesian/>
- Long & Freese, *Regression Models for Categorical and Limited Dependent Variables Using Stata, Revised Edition*, Stata Press, 2003
- Long, *Regression Models for Categorical and Limited Dependent Variables*, Sage Press, 1997
- *Longitudinal/Panel Data*, Stata, Release 10.
- Winkelmann, *Econometric Analysis of Count Data, 5e*, Springer, 2008

Course Outline:

1. Advanced Topics in Instrumental Variables
2. Advanced Panel Data Models
 - a. Endogenous regressors
 - b. Dynamic Panels
 - c. LDV

3. Discrete dependent variable models
 - a. Probit/logit
 - b. Multinomial & conditional logit
 - c. Nested Logit
 - d. Mixed Logit
4. Limited dependent variable models
 - a. Tobit
 - b. Sample selection models
 - c. Two-step estimation models
 - d. Count data models
5. Bayesian analysis of probit & tobit models (time permitting)

Class Paper

The paper required for this class must treat a topic within the general area of Microeconometrics. The main focus of the paper is **econometric methodology**. It must be either

- (i) a Monte Carlo experiment. Thorough examination of the performance of an estimator or a test statistic commonly used in microeconometrics, or
 - (ii) (ii) replication and extension an example from the literature.
- It must be at least 15 pages in length (1 inch margins, 11 point font, double space) **excluding** references. The paper must be well written, with proper grammar and spelling. Extreme care must be given to avoiding plagiarism. See <http://www.lsu.edu/judicialaffairs/Plagiarism.htm>. Your paper will be run through Turnitin. See <http://www.turnitin.com/static/plagiarism.html>.
 - All equations must be produced with a proper equation editor.
 - Topic selection and a one page outline is due **March 23**.
 - Final paper is due **April 24**. No late papers will be accepted.