

Spring 2016

ECO7427 ECONOMETRICS METHOD I

Instructor: C. Ai

Meeting period: 5-6

Meeting place: HGS 250

Office: Mat #336

Phone: 2-7859

Office Hours: by appointment

tsinghua@ufl.edu

Reading List

This is the second course in econometric sequence. The main objective is to equip students with adequate econometric techniques so that they can conduct empirical research. Topics covered include estimation and hypothesis testing in GMM setting, modeling treatment effects and modeling time series.

The materials covered in this course come from several sources including

Jeffrey Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, MIT Press, 2010.

Whitney Newey and Daniel McFadden, *Large Sample Estimation and Hypothesis Testing*, Handbook of Econometrics.

Guido M. Imbens, *Recent Developments in the Econometrics of Program Evaluation*, NBER Working Paper.

Guido M. Imbens, *Matching Methods in Practice: Three Examples*, NBER Working Paper.

Myoung Jae Lee, *Micro-Econometrics for Policy, Program and Treatment Effects*, Oxford University Press.

James D Hamilton, *Time Series Analysis*, Princeton University Press.

The grades of this course will be based on multiple exams. The exact dates of the exams will be announced in class.

Topic I. Generalized Method of Moment Estimation

Wooldridge, Chapter 14

D. McFadden and W. Newey, "Large Sample Estimation and Hypothesis Testing," Handbook of Econometrics IV, Chapter 36.

Amemiya, "Non-Linear Regression Models", Handbook of Econometrics I, 334-389

L.P. Hansen, "Large Sample Properties of GMM Estimators," *Econometrica* 50, 1985, 1029-1054

Robinson, P., "Best Nonlinear Three-Stage Least Squares Estimation of Certain Econometric Models," *Econometrica* 59, 1991, 755-786

L. Hansen and K. Singleton, "Generalized IV Estimation of Nonlinear Rational Expectations Models," *Econometrica*, 50, 1982

R. Engle, "Wald, LR and LM Tests in Econometrics" Handbook of Econometrics, Vol. 2, 775-825

W. Newey, "Maximum Likelihood Specification Testing and Conditional Moment Test," Econometrica, 1985, 53, 1047-1070

Topic II. Program evaluation

Wooldridge, Chapter 21.
Lecture Notes.

Topic III. Stationary Time Series

Hamilton, Chapter 10, 11

Topic IV. Nonstationary Time Series

Hamilton, Chapter 15 - 18.

Topic V. Cointegration

Hamilton, Chapter 19-20