Course Syllabus
EE426: Econometrics II
Semester 2/2011

Instructor: Assoc.Prof. Tatre Jantarakolica, PhD.
Room #9 Faculty of Economics
Tel. 0-2613-2467 e-mail: tatre@econ.tu.ac.th

Time: Tuesday and Thursday 11:00-12:30

Course Objective:
This course is designed to provide advanced econometrics techniques and enable students to apply econometric tools for economic analysis. Materials in this course will be balanced between theoretical concept and practices with the actual data and econometric software.

Pre-requisite: EE 425

Evaluation:

Mid-term examination	30 %
Final examination	40 %
Assignment	30 %

Computer Software: STATA

Course Content:

1. Review Basic Econometrics Concept

Diagnostic Tests
- Its Relative Importance
- Key Diagnostic Tests
  - (a) Heteroskedasticity
  - (b) Residual Normality
  - (c) Functional Form Misspecification Tests
  - (d) Multicollinearity
- Functional Forms of Regression Model
  - (a) Types of Specification Errors
  - (b) Test for Functional Form Misspecification (RESET, and Non-nested tests)

2. Estimation methods
- 2.1 Least Squares
- 2.2 System Estimation Methods
- 2.3 MLE
- 2.4 GMM

3. Limited Dependent Variable Models

4. Panel Data Estimation

5. Time-series Econometrics

Required Texts:

*Gujarati, D. (2009). *Basic Econometrics.* 5th ed. Singapore: McGraw-Hill.

Heij, C., deBoer, P., Franses, P.H., Kloek, T., & van Dijk, H.K. (2004). *Econometric Methods with Applications in Business and Economics.* New York: Oxford University Press. (Chapter 4)

Johnston, J., & DiNardo, J. (1997). *Econometric Methods.* 4th ed. Singapore: McGraw-Hill.

Reference Texts:

Enders, W. (2004), *Applied Econometric Time Series*, New York: John Wiley & Sons.
Greene, W.H. (2003). *Econometric Analysis.* 5th ed. Upper Saddle River, NJ: Prentice Hall.
Wooldridge, J.M. (2006). *Introductory Econometrics: A Modern Approach.* 3rd ed. Mason, OH: Thomson-South-Western.

Course Schedule

Week	Content	Chapter	Assign
1	Review	1-13	
	Review	1-13	
2	Estimation Method – GLS		
	Estimation Method – GLS		
3	Estimation Method – System Estimation	18-20	
	Estimation Method – System Estimation (Cont.)	18-20	
4	Estimation Method – System Estimation (Cont.)	18-20	
	Estimation Method – System Estimation (Cont.)	18-20	
5	Estimation Method – MLE	Heij 4	
	Estimation Method – MLE (Cont.)	Heij 4	
6	Estimation Method – MLE (Cont.)	Heij 4	
	Estimation Method – GMM	Heij 4	
7	Estimation Method – GMM (Cont.)	Heij 4	
	Estimation Method – GMM (Cont.)	Heij 4	
8	**Mid-term week**		
9	Limited Dependent Variables Model	15	
	Limited Dependent Variables Model (Cont.)	15	
10	Limited Dependent Variables Model (Cont.)	15	
	Limited Dependent Variables Model (Cont.)	15	
11	Panel Data Model	16	
	Panel Data Model (Cont.)	16	
12	Panel Data Model (Cont.)	16	
	Panel Data Model (Cont.)	16	
13	Time Series Models – Properties	21-22	
	Time Series Models – Unit Root Test	21-22	
14	Time Series Models – ARIMA Models	21-22	
	Time Series Models – GARCH Models	21-22	
15	Time Series Models – VARs Models	21-22	
	Time Series Models – Cointegration Test	21-22	
16	**Final Exam**		