Econometrics I
Department of Economics
Sogang University
Fall 2017

Instructor:

In Choi, E-mail: inchoi@gmail.com

Office Hours: by appointments

Text:

- Greene, W.H. (2003) *Econometric Analysis*. 5th Edition. Prentice Hall.

References:

- Angrist, J.D. and J._S. Pischeke (2009) *Mostly Harmless Econometrics*, Princeton Univ. Press.

- Brockwell. P. J. and R. A. Davis (1991) *Time Series: Theory and Methods*, Springer-Verlag.

- Davidson, J. (1994) *Stochastic Limit Theory*, Oxford University Press.

- Davidson, J. (2000) *Econometric Theory*, Blackwell Publishers.

- Gilat, A. (2011) *Matlab*, John Wiley.

- Hayashi, F. (2000) *Econometrics*, Princeton University Press.

- Patterson, K. (2000) *An Introduction to Applied Econometrics: A Time Series Approach*, MacMillan Press.

- Tsay, R. (2002) *Analysis of Financial Time Series*, John Wiley.

- Wooldridge, J. (2002) *Econometric Analysis of Cross Section and Panel Data*. MIT Press

- Zellner, A. (1971) *An Introduction to Bayesian Inference in Econometrics*, Wiley.

Description of the Course:

The purpose of this course is to introduce basic theory and applications of econometrics at the graduate level. The course requires basic knowledge of probability and statistics. Matrix algebra will be used throughout the course, but no previous knowledge is assumed. Students are required to perform computations using Eviews and Matlab.

Grading:

There will be homework, research report, midterm and final examinations. These will count toward the final grade as follows.

Midterm	20%
Final	40%
Homework	20%
Report	20%

Examinations:

There will be a midterm examination and a final examination. These are closed-book, close-note examinations, but students are allowed to bring a sheet of A4-sized paper on which they can write down or print any information which they expect to be useful for the examinations.

Course Outline and Reading Guide:

1. Introduction (G Ch 1)

2. Multiple linear regression model (G Ch 2)

3. Least squares estimation (G Ch 3)

4. Finite sample theory for least squares estimation (G Ch 4)

5. Asymptotic theory for least squares estimation (G Ch 5)

6. Hypothesis testing for linear models (G. Ch 6)

7. Generalized regression model and heteroscedasticity (G Ch 8)

8. Panel data (G Ch 13)

9. Time series analysis (G Ch 20)