

**Boston College**  
**Department of Economics**  
**EC 760 Econometrics I, Spring 1999**  
**Tuesdays and Thursdays 9-10:15 am Carney 9**

Professor Serena Ng  
Office Hours: Tuesdays and Thursdays 10:30-noon

This is a course on the classical linear regression model. Knowledge of matrix algebra is essential.

Recommended Text

Greene, *Econometric Analysis*, 3<sup>rd</sup> Edition (Prentice Hall)  
Johnston and diNardo, *Econometric Methods* (Mcgraw Hill)

Other Useful Text:

Davidson and MacKinnon, *Estimation and Inference in Econometrics*  
Pindyck and Rubinfeld, *Econometric Models and Economic Forecasts*  
Fomby, Hill, and Johnson, *Advanced Econometric Methods*  
Judge, Griffiths, Hill, Lee, *The Theory and Practice of Econometrics*

Evaluation:

There will be 3 problem sets, each accounting for 20% of the grade. 2 points per day will be deducted for problem sets that are turned in late. The final exam will be 40% of the grade.

Estimation

1. Assumptions of the Classical Linear Regression Model  
Greene 6.1-6.3
2. Finite Sample and Asymptotic Properties of the Least Squares Estimator  
Greene 6.4-6.7
3. Non-Spherical Errors and GLS  
JD 5.5
4. Instrumental Variables  
Greene 6.7 and JD 5.5
5. Least Squares and IV as a Method of moments estimator  
JD 10.2-10.5
6. The Maximum Likelihood Estimator  
Greene 6.8 and JD 5.1-5.2

Inference

1. The F Test of Linear Restrictions  
Greene 7.1
2. The Wald, LM and LR tests  
JD 5.3
3. Tests of Non-nested hypothesis  
Greene 7.10