ECON 8080
Spring 2009
Instructor: Masako Miyanishi
Office and contacts: Office 528 Brooks Hall, email masako@terry.uga.edu
Office hours: Tuesday and Thursday 9:30am – 10:30am or by appointment

Time and Location: Tuesday and Thursday, 8-9:15am, Sanford 204.

Textbook:
Supplementary textbooks: Jeffrey M. Wooldridge, *Introductory Econometrics*, Thomson
James H. Stock and Mark W. Watson, *Introduction to Econometrics*, Pearson

Journal articles:

Computer software:
State, Matlab, etc., anything you are familiar with.

Grading policy:
30% Problem Sets
20% Midterm Exam, Tuesday, February 24, in class
50% Final exam Tuesday, May 5, 8 – 11pm

Course outline:
- Review of linear algebra
- Review of basic probability and statistics
• The algebra of least squares (Hayashi, section 1.2)
• The classical regression model (Hayashi, sections 1.1 and 1.3)
• Hypothesis testing (Hayashi, sections 1.4 and 1.7)
• Generalized least squares (Hayashi section 1.6)
• Asymptotic distribution theory (Hayashi, sections 2.1-2.2)
• Large sample properties of OLS (Hayashi, sections 2.3 and 2.9)
• Hypothesis testing—asymptotic results (Hayashi, sections 2.4-2.6)
• Maximum likelihood estimation (Hayashi, section 1.5)
• Heteroskedasticity and serial correlation (Hayashi, sections 2.7, 2.8, 2.10, 2.11)
• Simultaneous equations bias (Hayashi, sections 3.1-3.2)
• Applied econometrics
• General formulation (Hayashi, section 3.3)
• Generalized method of moments (Hayashi, sections 3.4-3.6)
• Uses of GMM (Hayashi, sections 3.8-3.9)
• Maximum likelihood estimation – a deeper perspective
• Panel data (Hayashi, sections 5.1-5.4)
• Topics related to cross sectional data
• Topic related to time series data