- James Hamilton
- University of California, San Diego
- Economics 220B, Winter 2009
- Course web page: http://dss.ucsd.edu/~jhamilto/Econ220B.html

Obtaining the Reading Material

Books available at UCSD bookstore:

Fumio Hayashi, Econometrics, <u>Princeton University Press</u>, 2001. This is the main text for the course. <u>Click here</u> for the home page for Hayashi's text.

James D. Hamilton, Time Series Analysis, <u>Princeton University Press</u>, 1994. This book is used as an optional supplementary text for the course and is also used in other courses at UCSD.

Journal articles:

N. Gregory Mankiw, David Romer, and David Weil, "A Contribution to the Empirics of Economic Growth," <u>Quarterly Journal of Economics</u>, 107, May 1992, pp. 407-437.

Howard J. Wall, "Using the Gravity Model to Estimate the Costs of Protection," Federal Reserve Bank of St. Louis Review, Jan/Feb 1999, pp. 33-40.

Stephen V. Cameron and James J. Heckman, "The Nonequivalence of High School Equivalents," <u>Journal of Labor Economics</u>, Vol. 11, part 1, Jan 1993, pp. 1-47.

Joshua D. Angrist, "Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records," <u>American Economic Review</u>, 80, June 1990, pp. 313-336; <u>Errata</u>, December 1990, pp. 1284-1286.

James D. Hamilton, "The Supply and Demand for Federal Reserve Deposits," <u>Carnegie-Rochester Conference Series on Public Policy</u>, 49, December 1998, pp. 1-44.

Hard copies of above articles are available in the graduate student mailroom (Room 213 of Sequoyah Hall). Please keep these articles in the mail room at all times. You can also try to obtain the articles from the original sources referenced here.

Alternatively, several of the articles can be downloaded. The syllabus you are now reading can also be viewed as an HTML document at http://dss.ucsd.edu/~jhamilto/Econ220B.html. If you are viewing this as an HTML document, clicking on any active link above will take you immediately to the source where the article can be viewed online or downloaded. You will need the Adobe Acrobat Reader to view these, which can be downloaded from Adobe.

Grading Policy

Grades for Econ 220B will be determined as follows:

- o 20%: Problem Sets. You may work together on these, but must hand in your own write-up of the answers. These are used as a study guide and supplement to the reading and lectures.
- o 30%:Midterm Exam. This will be on Monday, Feb 9. No books or notes allowed.
- o 50%: Final Exam. This will be on Monday, March 16, from 11:30 to 2:30. No books or notes allowed.

Office hours for Professor Hamilton:

Tuesdays 12:30-1:30 and Fridays 1-2 in Econ 307

Office hours for T.A. Michael Bauer:

Wed 3-4 in Sequoyah 235

An optional review session will sometimes be held Fridays 11:00-12:00 in Sequoyah 244

Course Outline

Mon Jan 5 Wed Jan 7	No class meeting Review of linear algebra (Hamilton, Section A.4, pp. 721-739)
Fri Jan 9	[Special make-up session meets in Seq 244] The algebra of least squares (Hayashi, Section 1.2)
Mon Jan 12	The classical regression model (Hayashi, Sections 1.1 and 1.3; Hamilton, Section 8.1)
Wed Jan 14	Hypothesis testing (Hayashi, Sections 1.4 and 1.7)
Mon Jan 19	University holiday no scheduled class
Wed Jan 21	Generalized least squares (Hayashi, Section 1.6)

Mon Jan 26 Asymptotic distribution theory (Hayashi, Sections 2.1-2.2; Hamilton, Section 7.1)

- Large sample properties of OLS (Hayashi, Sections 2.3 and 2.9; Hamilton, Wed Jan 28 Section 8.2) Hypothesis testing-- asymptotic results (Hayashi, Sections 2.4-2.6; Hamilton, Mon Feb 2 Section 8.2) Maximum likelihood estimation (Hayashi, Section 1.5; Hamilton, Section 5.7) Wed Feb 4 Mon Feb 9 Midterm exam Heteroskedasticity and serial correlation (Hayashi, Sections 2.7, 2.8, 2.10, 2.11; Wed Feb 11 Hamilton, Section 8.3) University holiday-- no scheduled class Mon Feb 16 Simultaneous equations bias (Hayashi, Sections 3.1-3.2; Hamilton, Section 9.1) Wed Feb 18 Applied econometrics (Mankiw, Romer, and Weil; Wall) Mon Feb 23
- Wed Feb 25 Applied econometrics (Cameron and Heckman; Angrist; Hamilton 1998)
- Mon Mar 2 General formulation (Hayashi, Section 3.3; Hamilton, Section 9.2)
- Wed Mar 4 Generalized method of moments (Hayashi, Sections 3.4-3.6; Hamilton, Section 14.1)
- Mon Mar 9 Uses of GMM (Hayashi, Sections 3.8-3.9; Hamilton, Section 14.2)
- Wed Mar 11 Maximum likelihood estimation-- a deeper perspective (Hamilton, Section 14.4)
- Mon Mar 16 Final exam (11:30-2:30)