

James Hamilton
University of California, San Diego
Economics 220B, Winter 2008
Course web page: <http://dss.ucsd.edu/~jhamilto/Econ220B.html>

Obtaining the Reading Material

Books available at UCSD bookstore:

Fumio Hayashi, *Econometrics*, [Princeton University Press](#), 2001. This is the main text for the course. Click here for the [home page for Hayashi's text](#).

James D. Hamilton, *Time Series Analysis*, [Princeton University Press](#), 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," [Quarterly Journal of Economics](#), 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," [Journal of Labor Economics](#), 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," [American Economic Review](#), 80, June 1990, pp. 313-336; [Errata](#), December 1990, pp. 1284-1286.

James D. Hamilton, "The Supply and Demand for Federal Reserve Deposits," [Carnegie-Rochester Conference Series on Public Policy](#), 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 on <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:

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.

30%: Midterm Exam. This will be on Monday, Feb 11. No books or notes allowed.

50%: Final Exam. This will be on Monday, March 17, from 11:30 to 2:30. No books or notes allowed.

Office hours for Professor Hamilton:

Mondays 1-2 and Fridays 10:15-11:00 in Econ 307

Office hours for T.A. Michael Bauer:

Mondays 3:30-4:30 and Thursdays 5-6 in Sequoyah 235.

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

Course Outline

Mon Jan 7 Review of linear algebra (Hamilton, Section A.4, pp. 721-739)

Wed Jan 9 The algebra of least squares (Hayashi, Section 1.2)

Mon Jan 14 The classical regression model (Hayashi, Sections 1.1 and 1.3; Hamilton, Section 8.1)

Wed Jan 16 Hypothesis testing (Hayashi, Sections 1.4 and 1.7)

Mon Jan 21 University holiday-- no scheduled class

Wed Jan 23 Generalized least squares (Hayashi, Section 1.6)

Mon Jan 28 Asymptotic distribution theory (Hayashi, Sections 2.1-2.2; Hamilton, Section 7.1)

Wed Jan 30 Large sample properties of OLS (Hayashi, Sections 2.3 and 2.9; Hamilton, Section 8.2)

Mon Feb 4	Hypothesis testing-- asymptotic results (Hayashi, Sections 2.4-2.6; Hamilton, Section 8.2)
Wed Feb 6	Maximum likelihood estimation (Hayashi, Section 1.5; Hamilton, Section 5.7)
Mon Feb 11	Midterm exam
Wed Feb 13	Heteroskedasticity and serial correlation (Hayashi, Sections 2.7, 2.8, 2.10, 2.11; Hamilton, Section 8.3)
Mon Feb 18	University holiday-- no scheduled class
Wed Feb 20	Simultaneous equations bias (Hayashi, Sections 3.1-3.2; Hamilton, Section 9.1)
Mon Feb 25	Applied econometrics (Mankiw, Romer, and Weil; Wall)
Wed Feb 27	Applied econometrics (Cameron and Heckman; Angrist; Hamilton 1998)
Mon Mar 3	General formulation (Hayashi, Section 3.3; Hamilton, Section 9.2)
Wed Mar 5	Generalized method of moments (Hayashi, Sections 3.4-3.6; Hamilton, Section 14.1)
Mon Mar 10	Uses of GMM (Hayashi, Sections 3.8-3.9; Hamilton, Section 14.2)
Wed Mar 12	Maximum likelihood estimation-- a deeper perspective (Hamilton, Section 14.4)
Mon Mar 17	Final exam (11:30-2:30)