Grading: Grades are determined by performance on two midterm exams (30% each) and a final exam (40%). The midterms are in-class exams on Wednesday, February 22 and on Wednesday, April 12. The comprehensive final is on Tuesday May 16 from 10:30 am to 1 pm in this classroom.


Each text has unique strengths. Romer provides a good organization of the material and often provides a nice intuitive explanation. The texts by Barro and Sala-i-Martin and by Blanchard and Fischer provide deeper technical knowledge that one must acquire if one wants to read literature on the research frontier. (I did not order Recursive Macroeconomic Theory by Lars Ljungqvist and Thomas J. Sargent, but this book is an excellent introduction to advanced techniques in macroeconomic analysis.)

There are a few suggested readings from Interest and Prices by Michael Woodford and from Monetary Theory and Policy (2nd Edition) by Carl Walsh, but these texts have not been ordered. Woodford’s text is technically sophisticated and is particularly focused on recent research into monetary policy rules using a New-Keynesian framework. Walsh’s text emphasizes all types of monetary issues.

Texts are referenced below by the last names of authors. The course will probably only cover closed-economy macro topics. If you are interested in open-economy macroeconomic questions an excellent text is Foundations of International Macroeconomics by Maurice Obstfeld and Kenneth Rogoff.

While this syllabus includes many important articles, it contains more readings than one is able to digest in a single semester. This lengthy reading list is designed to provide you with additional resources in case you want a deeper understanding of some topics, now or sometime in the future. If you want to develop an expertise in the area of macroeconomics, you will eventually need to become familiar with most of these articles. I will let you know which articles are essential for this course.


There are many references to National Bureau of Economic Research working papers (denoted as NBER WP). Since the Economics Department subscribes to this series you can download these papers for yourself or use the department’s hard copy (if you can find it) to make a copy for yourself. The
syllabus references other working papers, some which come from other universities and some from the Federal Reserve System. Most items from the 12 Federal Reserve Banks and from the Board of Governors of the Federal Reserve System may be ordered free of charge or downloaded from the Web. See the KU Department of Economics Web page http://www.ku.edu/~econ/ or my Web page for easy connections to various other sources of information from the Web. Also, ECONLIT is a useful tool for tracking down papers, mostly ones that are published or in the collection of NBER Working Papers. Other working papers archives can also be found on the KU Web page. I will use Blackboard and my Web page, http://www.people.ku.edu/~jkeating/, to distribute some course information (e.g. the syllabus, homework questions, homework solutions, etc.). **Homework** will be assigned with some regularity. The questions will sometimes be drawn from the texts. I will not collect your answers but I will typically provide solutions to the questions. It is very important that you work hard on these questions as they are useful “leading indicators” of future exam questions.

**Abbreviations:**
- ECMT=Econometrica
- JME=Journal of Monetary Economics
- JMCB=Journal of Money, Credit, and Banking
- JPE=Journal of Political Economy
- AER=American Economic Review
- JFE=Journal of Financial Economics
- QJE=Quarterly Journal of Economics
- EER=European Economic Review
- RESTAT=Review of Economics and Statistics
- JEDC=Journal of Economic Dynamics and Control
- CRCS=Carnegie-Rochester Conference Series
- RESTUD=Review of Economic Studies
- JEL=Journal of Economic Literature

**Course Outline**

**Foundations of Macroeconomic Analysis**

Blanchard, O. "What Do We Know About Macroeconomics that Fisher and Wicksell Did Not?" QJE 115, no. 4 (November 2000): 1375-1410.


Blanchard and Fischer, Chapter 1

Walsh, Chapter 1

Woodford, Chapter 1


Stock J. and M. Watson “Business cycle fluctuations in U.S. macroeconomic time series” Chapter 1 in *Handbook of Macroeconomics* (also available as an NBER WP)

Stock, James & Mark Watson “Has the Business Cycle Changed? Evidence and Implications” in Monetary Policy and Uncertainty, Kansas City Federal Reserve Bank’s 2003 Symposium


Backus D., P. Kehoe “International evidence on the historical properties of business cycles” AER 1992


The Solow Growth Model

Romer, Chapter 1
Barro and Sala-i-Martin, sections 1.1,1.2
Solow R. “A contribution to the theory of economic growth” QJE 1956
Solow R. “Technical change and the aggregate production function” RESTAT 1957
Swan T.W. “Economic growth and capital accumulation” Economic Record, 1956
Lucas R. “Why capital doesn’t flow from rich to poor countries?” AER 1990

Empirical Evidence on Growth

Barro R. “Notes on growth accounting” NBER WP
Barro and Sala-i-Martin, Chapters 10,11,12
Mankiw N., D. Romer and D. Weil “A contribution to the empirics of economic growth” QJE 1992
Fischer S. “The role of macroeconomic factors in growth” JME 1993
Durlauf S. and D. Quah “The new empirics of economic growth” Handbook of Macroeconomics (also available as an NBER WP)

Two-Period Dynamic Structures (the Overlapping Generations Model)

Romer: Sections 2.8 and 2.9
Barro & Sala-i-martin: Appendix to Chapter 3
Blanchard & Fischer: Chapter 3

Infinite Horizon Models

Barro and Sala-i-Martin, Chapter 2, Appendix on Mathematical Methods, Chapter 3
Romer, Chapter 2 Part A
Endogenous Growth Theory

Romer, Chapter 3
Barro and Sala-i-Martin, Chapter 1,3,4,5
Jones L. and R. Manuelli “The sources of growth” 1994 University of Wisconsin working paper
Romer P. “Increasing returns and long-run growth” JPE 1986
Romer P. “Endogenous technological change” JPE 1990
Lucas R. “On the mechanics of economic development” JME 1988
Rebelo S. “Long-run policy analysis and long-run growth” JPE 1991
Jones C. Introduction to Economic Growth. 2nd Ed, 2002, McGraw Hill, Chapters 4,5,6,7,8
Galar O. and O. Moav “Natural selection and the origin of economic growth” QJE 2002

Real Business Cycle Theory

Romer, Chapter 4
Blanchard and Fischer, pages 277-283 and Chapter 7
McCallum B. "Real business cycle models," in Modern Business Cycle Theory, ed R. Barro
King R. and S. Rebelo “Resuscitating real business cycles” Handbook of Macroeconomics (also
available as an NBER WP)
Cochrane J. “Solving real business cycle models by solving systems of first order conditions” U. of
Chicago, B-School WP
Campbell J. "Inspecting the mechanism: An analytical approach to the stochastic growth model," JME
1994.
Uhlig H. “A Toolkit for Analyzing Nonlinear Stochastic Dynamic Models” in Marimon R. and
King R., C. Plosser and S. Rebelo "Production, Growth and Business Cycles: I. The Basic Neoclassical
Model," JME 1988 (and the unpublished Technical Appendix)
Prescott E. "Theory ahead of business cycle measurement," CRCS, 1986
J. of Economic Perspectives, Summer 1989, Articles On Real Business Cycle Theory
Farmer R., The Macroeconomics of Self-Fulfilling Prophecies, Ch 5
Evidence on RBC Models

Sims, C. "Macroeconomics and Reality," ECMT 1980
Altonji J. “Intertemporal substitution in labor supply: Evidence from micro data” JPE 1986
Watson M "Measures of Fit for Calibrated Models" JPE, 1993, pp. 1011-41
Keating J. "Postwar US Business Cycles in Models with Long-Run Monetary Neutrality" working paper
Lawrence J. Christiano, Martin Eichenbaum and Charles L. Evans, “Monetary policy shocks: What have we learned and to what end?” Chapter 2 in Handbook of Macroeconomics, 1999, vol 1A, 65-148

Solving Models with Rational Expectations

Chapter 3: Macroeconomics Lecture Notes for a Masters Course, Gregor Smith, unpublished, 2000
McCallum B. Monetary Economics: Theory and Policy, Chapter 8
Farmer R., *The Macroeconomics of Self-Fulfilling Prophesies*, Chapters 2 and 3
Blanchard, O. and C. Kahn, "The Solution of Linear Difference Models under Rational Expectations"
ECMT 1980
McCallum, B “On Non-Uniqueness in Rational Expectations Models: An Attempt at Perspective” JME 11(2), March 1983, pages 139-68..
McCallum B. “Role of the Minimal State Variable Criterion in Rational Expectations Models” *International Tax and Public Finance*; Nov. 1999, pages 621-39 (also NBER WP)
McCallum, B “Solutions to Linear Rational Expectations Models: A Compact Exposition” *Economics Letters*; 61(2), November 1998, pages 143-47. (also NBER WP)
Blanchard and Fischer, pages 356-361, Section 5.1 and the Appendix to Chapter 5
Soderlind P. “Solution and Estimation of Rational Expectations Macro models with Optimal Policy” EER 1999, 813-823
Sargent T. *Macroeconomic Theory*, Chapters 9 and 11
Burnside C. notes on *Dynamic Optimization*, Chapter 1

**Imperfect Information Business Cycle Models (New Classical Macroeconomics)**

Romer, Chapter 6 Section A
Muth, J.F. “Rational expectations and the theory of price movements” ECMT 1961
McCallum B. "Rational Expectations and Macroeconomic Stabilization Policy," JMCE, 1980

**Evidence on Imperfect Information Models**

Gray J. and D. Spencer "Price Prediction Errors and Real Activity: A Reassessment", *Economic Inquiry*, 1990
Keating "Identifying VAR models under rational expectations," JME, 1990
Monetarism

Friedman M. "The role of monetary policy," AER, 1968

Empirical Evidence on Price Stickiness

Carlton D. "The rigidity of prices," AER 1986
Kashyap A. "Sticky Prices: New Evidence from Retail Catalogs" QJE, 1995
Blinder A. "On sticky prices: Academic theories meet the real world," in Monetary Policy, ed. N.G. Mankiw, 1994
Rotemberg J. "Prices, Output, and Hours: An Empirical Analysis Based on a Sticky Price Model", JME 1996
Keating J. "Is Sticky Price Adjustment Important for Output Fluctuations?" KU working paper

Models of Sticky Price Adjustment

Romer, Chapter 5, Chapter 6 Parts B and C
Woodford, Chapter 3
Blanchard and Fischer, Chapter 8
Walsh: Chapters 2 and 5
Mankiw G. & R. Reis “Sticky Information versus Sticky Prices: A Proposal to Replace the New-Keynesian Phillips Curve” QJE 2002 (and also NBER WP 8290)
Taylor J. "Aggregate dynamics and staggered contracts," JPE, 1980
J. of Economic Perspectives, Winter 1993, Articles On New-Keynesian Economics
Mankiw N. “Small menu costs and large business cycles: A macroeconomic model of monopoly” QJE 1985
Blanchard O. and N. Kiyotaki “Monopolistic competition and the effects of aggregate demand” AER 1987
Caplin A. and D. Spulber “Menus costs and the neutrality of money” QJE 1991
Caplin A. and J. Leahy “State-dependent pricing and the dynamics of money and output” QJE, 1991
Ball L. and D. Romer “Real rigidities and the non-neutrality of money” Review of Econ. Studies 1990
Gordon R. “What is new-Keynesian economics?” J. of Economic Literature 1990
Carlton D. “The theory and the facts of how markets clear: Is industrial organization valuable
for understanding macroeconomics?” Chapter 15 in Handbook of Industrial Organization, Vol 1
Kerr W. and R. King "Limits on interest rate rules in the IS model" Richmond FRB Review 1996
Ohanian L., A. Stockman and L. Kilian "The effects of real and monetary shocks in a business cycle
model with some sticky prices," JMCB. 1995
Farmer R. "Nominal price stickiness as a rational expectations equilibrium," JEDC 1992
Benhabib J. and R. Farmer “Two New Keynesian Theories of Sticky Prices” working paper
Rotemberg J. and M. Woodford "Dynamic general equilibrium models with imperfectly competitive
Rotemberg J.J., M. Woodford “The cyclical behavior of prices and costs” Chapter 16 Handbook
of Macroeconomics
Yun T "Nominal Price Rigidity, Money Supply Endogeneity, and Business Cycles," JME, 1996,
Bernanke B., M. Gentler and S. Gilchrist “The financial accelerator in a quantitative business
cycle framework” Handbook of Macroeconomics (also available as an NBER WP)

Models of Aggregate Labor Markets

Shimer R. , R. Rogerson & R. Wright “Search theoretic models of the labor market: A survey” JEL, 2005
Romer, Chapter 10
Blanchard & Fischer Sections 9.1, 9.2, 9.3 and 9.4
Shapiro C. and J. Stiglitz “Equilibrium unemployment as a worker discipline device” AER 1984
Lilien D. “Structural shifts and cyclical unemployment” JPE 1982
Abraham K. and L. Katz “Cyclical unemployment: Sectoral shifts or aggregate disturbances” JPE 1986
Fitzgerald T. “An Introduction to the Search Theory of Unemployment” Cleveland Fed Review
D.T. Mortensen, C.A. Pissarides “New developments in models of search in the labor market” Chapter
39, Handbook of Labor Economics, Volume 3B.
Hall, R.E. “Labor-market frictions and employment fluctuations” Chapter 17 Handbook of
Macroeconomics
C.A. Pissarides, Equilibrium Unemployment Theory, 2nd Ed, 2000, MIT Press