

Economics 6110
Macroeconomics I
Fall 2010

Instructor: Prof. Gregory Givens, MTSU, email: ggivens@mtsu.edu

Time and Location: Monday, 6:00-9:00 PM, BAS S274

Office Hours: by appointment

Required Textbook:

D. Romer, *Advanced Macroeconomics* (3rd Edition), McGraw-Hill/Irwin, 2005.

Additional References:

D. Acemoglu, *Introduction to Modern Economic Growth*, Princeton University Press, 2009.

R. Barro and X. Sala-i-Martin, *Economic Growth* (2nd Edition), MIT Press, 2003.

O. J. Blanchard and S. Fisher, *Lectures on Macroeconomics*, MIT Press, 1989

L. Ljungqvist and T. Sargent, *Recursive Macroeconomic Theory* (2nd Edition), MIT Press, 2004.

Course Website: <http://frank.mtsu.edu/~ggivens>

Course Evaluation: Grades for this course will be based on your performance on a series of homework assignments and one three-hour final examination according to the following distribution:

Assignments	50%
Final Exam	50%

Homework Policy: While I encourage group work on the homework assignments, everyone is required to turn in an *individual* solution. Be advised that this policy does not mean that you should simply copy someone's solution if you are struggling with the assignment. Instead, start each problem set early and take advantage of office hours. I am eager to assist those who demonstrate a willingness to master the subject material. Late assignments are unacceptable and will not be graded. In addition, your lowest scoring assignment will not be counted towards the final average.

Exam Date and Location: TBA

Course Description

This course provides broad exposure to the core issues and dominant theories surrounding modern macroeconomics. Mathematical models are used to address the fundamental questions of the macroeconomy, and examples of relevant empirical work illustrate how the theories can be applied and tested. The intent is to provide a comprehensive survey of the field for students who will not specialize in macroeconomics as well as a foundation for those who wish to conduct research in the areas of macroeconomics or monetary economics.

The first part of the course is concerned with the subject of long run economic growth. We begin by studying the implications of the Solow-Swan model, which emphasizes the relationship

between capital accumulation and growth in real income while assuming exogenous technological progress in addition to a fixed and exogenous rate of saving. Maintaining these assumptions, we go on to examine the implications of modifying the basic Solow-Swan model to incorporate an explicit *research and development* sector. Growth under these conditions is endogenous, as the allocation of resources to knowledge accumulation is determined within the model. Finally, we investigate two growth models that relax the strict exogeneity condition of the savings rate. Instead, saving is endogenous and derived from the interaction of maximizing households and firms in competitive factor and product markets.

The second part of this course focuses on the subject of short run economic fluctuations. We begin by introducing the *real-business-cycle* (RBC) model of the economy. The RBC approach attempts to explain cyclical fluctuations in employment and real income using competitive general equilibrium models absent externalities, asymmetric information, or various other market imperfections and where the economy is subject only to real disturbances such as productivity and government spending shocks. Finally, we transition to models of the Keynesian variety in which markets are not necessarily competitive and nominal price adjustment is incomplete. We are especially interested in the ability of systematic monetary policy to affect the distribution of real income when economic agents form expectations rationally given the constraints on the price and wage-setting behavior of firms and households.

Tentative Lecture Schedule and Reading List

(† indicates *required* reading)

I. Long Run Models of Exogenous Growth

- †Romer, D. 2005. *Advanced Macroeconomics*, Chapter 1, sections 1.1 – 1.7.
- Barro, R. J. and Sala-i-Martin, X. *Economic Growth*, Chapter 1, sections 1.1 – 1.2.
- †Solow, R. 1956. “A Contribution to the Theory of Economic Growth.” *The Quarterly Journal of Economics* 70: 65-94.
- Swan, T. W. 1956. “Economic Growth and Capital Accumulation.” *Economic Record* 32: 334-361.

II. Long Run Models of Endogenous Growth

- †Romer, D. 2005. *Advanced Macroeconomics*, Chapter 3, sections 3.1 – 3.4.
- Barro, R. J. and Sala-i-Martin, X. *Economic Growth*, Chapter 1, section 1.3.
- †Romer, P. M. 1990. “Endogenous Technological Change.” *Journal of Political Economy* 98: S71-S102.
- Aghion, P. and P. Howitt. 1992. “A Model of Growth through Creative Destruction.” *Econometrica* 60: 323-351.

III. Overlapping Generations Models

- †Romer, D. 2005. *Advanced Macroeconomics*, Chapter 2, sections 2.8 – 2.12.
- Blanchard, O. J. and Fisher, S. *Lectures on Macroeconomics*, Chapter 3, sections 3.1 – 3.2.
- †Diamond, P. 1965. “National Debt in a Neoclassical Growth Model.” *American Economic Review* 55: 1126-1150
- Samuelson, P. A. 1958. “An Exact Consumption-Loan Model of Interest with or without the Social Contrivance of Money.” *Journal of Political Economy* 66: 467-482.

IV. The Neoclassical Growth Model

- †Romer, D. 2005. *Advanced Macroeconomics*, Chapter 2, sections 2.1 – 2.7.
- Blanchard, O. J. and Fisher, S. *Lectures on Macroeconomics*, Chapter 2, sections 2.1 – 2.3.
- Barro, R. J. and Sala-i-Martin, X. *Economic Growth*, Chapter 2, sections 2.1 – 2.6.
- Ramsey, F. P. 1928. “A Mathematical Theory of Saving.” *Economic Journal* 38: 543-559.
- Cass, D. 1965. “Optimum Growth in an Aggregative Model of Capital Accumulation.” *Review of Economic Studies* 32: 233-240.
- Koopmans, T. C. 1965. “On the Concept of Optimal Economic Growth.” In *The Economic Approach to Development Planning*, Amsterdam, Elsevier.

V. Real Business Cycle Models

- †Romer, D. 2005. *Advanced Macroeconomics*, Chapter 4.
- †King, R. G. and C. I. Rebelo. 1999. “Resuscitating Real Business Cycles.” In J. B. Taylor and M. Woodford, eds., *Handbook of Macroeconomics*, 927-1007. Amsterdam: Elsevier.
- Kydland, F. E. and E. C. Prescott. 1982. “Time to Build and Aggregate Fluctuations.” *Econometrica* 50: 1345-1370.
- Long, J. B. and C. I. Plosser. 1983. “Real Business Cycles.” *Journal of Political Economy* 91: 39-69.
- †Hansen, G. D. 1985. “Indivisible Labor and the Business Cycle.” *Journal of Monetary Economics* 16: 309-327.
- Christiano, L. J. and M. Eichenbaum. 1992. “Current Real-Business Cycle Theories and Aggregate Labor-Market Fluctuations.” *American Economic Review* 82: 430-450.
- Baxter, M. and R. G. King. 1993. “Fiscal Policy in General Equilibrium.” *American Economic Review* 83: 315-334.

- Campbell, J. Y. 1994. “Inspecting the Mechanism: An Analytical Approach to the Stochastic Growth Model.” *Journal of Monetary Economics* 33: 463-506.
- Greenwood, J., Hercowitz, Z. and G. W. Huffman. 1988. “Investment, Capacity Utilization, and the Real Business Cycle.” *American Economic Review* 78: 402-417.
- Burnside, C., Eichenbaum, M., and S. Rebelo. 1993. “Labor Hoarding and the Business Cycle.” *Journal of Political Economy* 101: 245-273.

VI. Keynesian Theories of Fluctuations and Optimal Stabilization Policies

- †Romer, D. 2005. *Advanced Macroeconomics*, Chapter 5, sections 5.1, 5.3 – 5.6.
- Poole, W. 1970. “Optimal Choice of Monetary Instruments in a Simple Stochastic Macro Model.” *The Quarterly Journal of Economics* 84: 197-216.

VII. Informational Rigidities, Rational Expectations, and Policy (In)effectiveness

- †Romer, D. 2005. *Advanced Macroeconomics*, Chapter 6, sections 6.1 – 6.3.
- Lucas, R. E. Jr. 1972. “Expectations and the Neutrality of Money.” *Journal of Economic Theory* 4: 103-124.
- †Sargent, T. and N. Wallace. 1975. “‘Rational Expectations,’ the Optimal Monetary Instrument, and the Optimal Money Supply Rule.” *Journal of Political Economy* 83: 241-254.
- Barro, R. J. 1976. “Rational Expectations and the Role of Monetary Policy.” *Journal of Monetary Economics* 2: 1-32.
- †Lucas, R. E. Jr. 1973. “Some International Evidence on Output-Inflation Tradeoffs.” *American Economic Review* 63: 326-334.
- †Barro, R. J. 1977. “Unanticipated Money Growth and Unemployment in the United States.” *American Economic Review* 67: 101-115.
- Barro, R. J. 1978. “Unanticipated Money, Output, and the Price Level in the United States.” *Journal of Political Economy* 86: 549-580.
- Mishkin, R. S. 1982. “Does Anticipated Monetary Policy Matter? An Econometric Investigation.” *Journal of Political Economy* 90: 22-51.

VIII. New Keynesian Models of Staggered Price Adjustment with Rational Expectations

- †Romer, D. 2005. *Advanced Macroeconomics*, Chapter 6, sections 6.4 – 6.6.
- †Fischer, S. 1977. “Long-Term Contracts, Rational Expectations, and the Optimal Money Supply Rule.” *Journal of Political Economy* 85: 191-205.
- Phelps, E. S. and J. B. Taylor. 1977. “Stabilizing Powers of Monetary Policy under Rational Expectations.” *Journal of Political Economy* 85: 163-190.

- †Taylor, J. B. 1979. “Staggered Wage-Setting in a Macro Model.” *American Economic Review* 69: 108-113.
- Taylor, J. B. 1980. “Aggregate Dynamics and Staggered Contracts.” *Journal of Political Economy* 88: 1-23.
- Fuhrer, J. C. and G. R. Moore. 1995. “Inflation Persistence.” *The Quarterly Journal of Economics* 110: 127-159.
- Goodfriend, M. and R. King. 1997. “The New Neoclassical Synthesis and the Role of Monetary Policy.” *NBER Macroeconomics Annual*, 231-283.
- McCallum, B. and E. Nelson. 1999. “An Optimizing IS-LM Specification for Monetary Policy and Business Cycle Analysis.” *Journal of Money, Credit, and Banking*, 31: 296-316.