Equilibrium Macroeconomics (Economics 348)
Wesleyan University, Fall 2011

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Office hours: Tuesday and Thursday, 3:30 – 5:00 pm and by appointment

Class meets Tuesday and Thursday, 1:10 – 2:30 pm, in PAC 001

Since the 1970’s, macroeconomics has witnessed a dramatic methodological shift away from models based on assumed relationships among aggregate variables (e.g., the IS-LM model), in favor of models derived from microeconomic foundations. Contemporary macroeconomic theory is grounded in the optimizing behavior of households and firms in dynamic general equilibrium settings. This course introduces some of the fundamental concepts, techniques and language of modern macroeconomics with the intention of developing a set of tools that will enable students to better understand current research.

The primary reference books for the course are Fabio-Cesare Bagliano and Giuseppe Bertola, Models for Dynamic Macroeconomics (Oxford) and Michael Wickens, Macroeconomic Theory: A Dynamic General Equilibrium Approach (Princeton). Other readings will be available through moodle or library reserve.

Economics is learned by practice. Approximately 4-7 problem sets will be assigned during the semester. Students may work together, but must turn in the assignments individually. Late assignments will not be accepted and no extensions will be granted. Each student’s lowest problem set grade will be dropped from the overall grade calculation.

Grades will be calculated as a weighted average, based on the problem sets (10%), two in-class midterm exams (20% each), a final paper (20%) and a comprehensive final exam (30%). Dates for the midterm exams will be announced in class. Midterm exams will not be given late; in the event of a serious illness, family emergency or university-sponsored travel, students may ask, in advance, for permission to take exams early or to have weight added to the final exam grade in place of the midterm. The final exam is scheduled for Tuesday, December 13 at 7 pm.

The use of electronic devices such as computers, mobile phones, etc. – including for text messaging – is not permitted in class.

This syllabus and the course outline are subject to modifications, which will be announced in class.
Course Outline and Reading List


Readings marked (o) are optional

I. Prologue: Getting to Modern Macroeconomics

Topics/concepts

- Rational expectations
- Lucas critique

Readings

- Wickens, 1.1-1.3

II. Technology, Capital Accumulation and Economic Growth

Topics/concepts

- Growth accounting
- Solow residual
- Convergence
- Solow model

Readings

- Lecture note “Technology, Capital Accumulation and Economic Growth”
- Bagliano, 4.1, 4.4
- (o) J. M. Keynes, “Economic Possibilities For Our Grandchildren” (1930)

III. Consumption: Basic Concepts in a Two-Period Model

Topics/concepts

- Lagrangian
- Euler equation
- Intertemporal elasticity
- Mathematical expectation
- Risk aversion

Readings

- Lecture note “Consumption: Basic Concepts in a Two-Period Model”
• Wickens, 4.2.3, 10.2

IV. General Equilibrium: Basic Concepts
Topics/concepts
• Competitive equilibrium
• Pareto optimality
• Welfare theorems
• Social planner
• State-contingent claims
• Risk sharing
• Market completeness
Readings
• Lecture note “General Equilibrium: Basic Concepts”
• Wickens, 10.4, 10.8
• (o) H. Varian, Microeconomic Analysis, ch. 18-19
• (o) L. Ljungqvist and T. Sargent, Recursive Macroeconomic Theory, ch. 8.1-8.6

V. Consumption in a Deterministic Dynamic Endowment Economy
Topics/concepts
• Life-cycle hypothesis
• Permanent income hypothesis
• Ricardian equivalence
Readings
• Wickens, 4.1-4.4, 5.1-5.3
• Lecture note “Consumption in Dynamic Economies,” 1, 2

VI. Consumption in a Stochastic Dynamic Endowment Economy
Topics/concepts
• Random walk hypothesis
• Precautionary saving
• Consumption CAPM
• Equity Premium
Readings
• Bagliano, 1
• Wickens, 10.5, 11.2.2
• Lecture note “Consumption in Dynamic Economies,” 3-6
• (o) L. Ljungqvist and T. Sargent, *Recursive Macroeconomic Theory*, ch. 3

VII. Consumption and Capital Accumulation in a Dynamic Economy

Topics/concepts
- Ramsey model
- Hamiltonian
- Phase diagram
- Linearization

Readings
- Lecture note “Capital and Labor in Dynamic Economies,” 1, 2
- Bagliano, 4.2-4.4
- Wickens, 2.1-2.4
- (o) R. Barro and X. Sala-i-Martin, *Economic Growth*, Appendix on Mathematical Methods, 1.3

VIII. Consumption, Capital Accumulation and Leisure in a Dynamic Economy

Topics/concepts
- Optimal taxation
- Ramsey problem
- Dynamic inconsistency

Readings
- Lecture note “Capital and Labor in Dynamic Economies,” 3
- Wickens, 4.6, 5.7.2-6.2
- C. I. Plosser, “Credibility and Commitment,” Speech, March 6, 2007

IX. Real Business Cycles

Topics/concepts
- Hodrick-Prescott filter
- Calibration

Readings
- Lecture note “Capital and Labor in Dynamic Economies,” 4
- Wickens, ch. 14
• (o) F. E. Kydland and E. C. Prescott, “Business Cycles: Real Facts and a
Monetary Myth,” *Federal Reserve Bank of Minneapolis Quarterly Review* 14:2
(Spring 1990)
• (o) N. G. Mankiw, “Real Business Cycles: A New Keynesian Perspective,”
*Journal of Economic Perspectives* 3:3 (Summer 1989)
• (o) R. G. King and S. T. Rebelo, “Resuscitating Real Business Cycles,” NBER
Working Paper 7534 (February 2000)

X. Money in a New Keynesian Economy

Topics/concepts
• Monopolistic competition
• Menu costs
• New Keynesian Phillips Curve

Readings
• Wickens, 8-9
• A. M. Sbordone, A. Tambalotti, K. Rao and K. Walsh, “Policy Analysis Using
DSGE Models: An Introduction,” *Federal Reserve Bank of New York Economic
Policy Review* 16:2 (October 2010)
• J. Gali and M. Gertler, “Macroeconomic Modeling for Monetary Policy

XI. Conclusion

Readings
(March 2003)
• P. Krugman, “How Did Economists Get It So Wrong?” *New York Times
Magazine*, September 6, 2007
• N. Kocherlakota, “Modern Macroeconomic Models as Tools for Economic
Policy,” *The Region*, May 2010