Economics 191-2 Syllabus

QUANTITATIVE MACROECONOMIC POLICY

Fall Term 2005.

Call No: 01052. Time Block F+ : Tuesday/Thursday 12:00–1:15. Room: Braker 118.

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September 6, 2005 (05-Fall-EC191-syl.tex)

Office hours: Mondays, 2:30–4:30pm; Wednesdays, 2:30–4:30pm. Other times by appointment. You are welcome to contact me by email about setting up an appointment to see me. I cannot overemphasize it that you should not hesitate to see me: I am working for You!

A web page is available for the course at http://blackboard.tufts.edu. My administration of the class goes principally via the web page. Class materials and announcements will regularly be made through the web page. Students who are already registered in the class will be able to log in in the usual way. Please check to see whether your email address is correct. I will add new students when they are admitted to the class. Let me know at once if you cannot log in.

1 Administrative Aspects

1.1 Requirements

The course grade will be based on students’ performance in a midterm, a final, a research paper, a number of homework assignments and class presentations of research papers.
1.1.1 Due Dates

- **The final exam** will take place at the time scheduled by the Registrar, *Wednesday, December 14*, 12:00–2:00pm. It will count for 40% of the grade.

- A *midterm* will take place Thursday, *October 20*. It will count for 20% of the grade.

- A **research paper** will be due Thursday, *December 8*. It will count for 30% of the grade. A proposal for the paper will be due October 6. A draft will be due on November 10.

- Please note the following dates: Tuesday, October 11, Columbus Day observance for this class (a “Monday” in the schedule), *no class*; Thursday, December 8, *last class*.

The first couple of homework assignments will be graded, so as I may be able to give you feedback prior to the drop date for the semester: *October 4*. Additional homework will be assigned periodically and will be not graded. The final exam will be cumulative. All deadlines for homework and exam dates will be observed strictly. Homework assignments are due at the end of the class on the assigned date. Late homework will *not* be graded. All exams will be closed book, but for the final you will be allowed to bring in some notes. Details will be given at the end of the term.

There will be at least five homework assignments during the term. The first two of them will count for 5% of the grade. The remainder 5% will come from class participation.

Regarding the research paper, please see [http://ase.tufts.edu/econ/research/class.html](http://ase.tufts.edu/econ/research/class.html) for a “definition” from the faculty viewpoint.

Paper topics will be decided in consultation with the instructor, and class presentations based on the papers will be required and will be scheduled during the last two weeks of the term, that is immediately after the Thanksgiving break.
Class participation will be expected in the usual fashion. However, in addition, material will be assigned on a voluntary basis for the purpose of brief class presentation. E.g., there have been a number of public as well as scholarly debates on some of the topics, with social security being a good case in point. An appropriate assignment would be to brief the class on the issues before we go into the analytics.

1.2 Text

The course will be based in part on

David Romer, *Advanced Macroeconomics*, McGraw Hill, third edition, 2005, which is the latest edition of a modern graduate level text. Whenever possible, reading assignments will be made from this text. In addition, a number of other sources will be used, as indicated below.

This is the first time that the course is taught. So, I hope you will bear with me as I try to find the right content and pitch. A number of books are referred to below and will be put on reserve as soon as possible. however, none of them will be needed any time soon.

2 Outline and Reading List

This class will develop further the tools of quantitative intermediate macroeconomic theory (EC 18) and employ them to explore a number of key policy questions, including using models of economic growth and business fluctuations to study macroeconomic stabilization policies in the presence of different type of shocks, developing optimizing models with nominal rigidities, analyzing social security reform, examining how to handle asset “bubbles” macroeconomically, and examining macroeconomic policy in a globalized environment. Statistical and econometric quantitative tools, at least as taught in EC 13, will also be helpful in certain parts of the course. Students will be asked to write a research paper that will satisfy the research paper requirement of the Quantitative Economics major.
The course emphasizes dynamics, the hallmark of macroeconomics. Most of the models we will use are set in discrete time. Therefore, we will need to develop some specific tools for that purpose. Some of the material is quite advanced. We will approach it slowly and carefully by emphasizing the economic intuition as we build up appropriate analytical background. As it is evident, the course aims at a balance between deep understanding some phenomena and breadth of coverage. It also exposes you to some original influential material. The course is taught for the first time, so some learning should take place and the syllabus will undergo some revision.

2.1 Introduction
Motivated from the tragic events following hurricane Katrina.

1. Supply shock due to destruction of capital, the long run case: application of Solow growth model.
   Self-sufficient class discussion.

2. Oil supply shock, the short run case: application of aggregate supply–aggregate demand model.

   Ioannides notes.

2.2 Macroeconomic Policy in the Long Run
1. Review of the Solow Growth Model:
   Romer, pp. 5–26.
2. Discrete dynamical systems.

This material is very important for understanding the tools of modern macroeconomics. An accessible self-contained treatment is available online. pp. 1–13, in Galor, Oded, *Introduction to Stability Analysis of Discrete Dynamical Systems*, September 18, 2003, manuscript; available online:

http://www.econ.brown.edu/fac/Oded_Galor/ Click on monograph: Discrete Dynamical systems

3. Application: government spending, productive vs. unproductive.

Ioannides Notes

4. Application: the environment and economic growth:

Romer, pp. 37–44.


5. Review of Overlapping Generations Model:

Romer pp. 76–92.

6. Application: budget deficit, national debt and fiscal policy

Ioannides notes.

Romer, pp. 559–579.

7. Application: social security

Romer, Problem 2.16, p. 96


Background material:
Diamond, Peter A., and John Geanakoplos, “Social Security Investment in Equi-
from Tisch Library, or
http://cowles.econ.yale.edu/ gean/art/p1070.pdf

A debate:

Diamond, Peter A. and Peter R. Orszag, “Saving Social Security,” *Journal of
Economic Perspectives*, 22, 2005, Spring, 11–32. Downloadable from Tisch Li-
brary.

Feldstein, Martin F. “Structural Reform of Social Security,” *Journal of Economic

8. New growth theory

Romer, pp. 100–165.

9. Global aspects of economic growth:

Ventura, Jaume “A Global View of Economic Growth,” National Bureau of Eco-
nomic Research working paper 11296, April 2005; downloadable from Tisch:
http://www.nber.org/papers/w11296

### 2.3 Life Cycle Optimization and Optimal Consumption and
Investment Behavior: Applications


2. Investment theory: R, Ch. 8, 386–432;

3. Application: bubbles in housing markets

Background material:

Case, Karl E., and Robert Shiller “Is There a Bubble in the Housing Market?”
Tisch Library.

4. Application: Stock market wealth versus housing wealth
   Background material:
   http://80-www-bepress-com.ezproxy.library.tufts.edu/bejm/advances/vol5/iss1/art1

2.4 Macroeconomic Policy in the Short and Medium Run
1. Review of the Keynesian IS-LM Aggregate Supply-Aggregate Demand models
   Modern foundations of IS-LM curves.
   Ioannides notes.
   Background readings
   Auerbach, Alan, and Laurence Kotlikoff, Macroeconomics, MIT Press, Ch. 8, 9, pp. 266–329. On reserve.

2. Inflation and monetary policy:
   Romer, pp. 496–552.
   Background readings


3. Globalization and monetary policy

Background material

Eichengreen, Barry “Global Imbalances and the Lessons from Bretton Woods,” NBER working paper 10497 May 2004. downloadable from Tisch library:

http://www.nber.org/papers/w10497


abstract_id=655402&CFID=18275775&CFTOKEN=41624570.

### 2.5 Topics in Business Cycles: The Information Economy

1. Volatility of GDP

   Basics:

   Background material

2. The business cycle vs. the information economy


http://faculty-web.at.northwestern.edu/economics/gordon/Productivity-Brookings.pdf

3. Monetary Policy and the Information Economy

Woodford, Michael, “Monetary Policy in the Information Age,” ; downloadable from:

http://www.kc.frb.org/PUBLICAT/SYMPOS/2001/papers/S02wood.pdf. See also the discussion, and why not, if you are curious the entire Kansas City Fed Symposium on Economic Policy for the Information Economy, proceedings at: