SIMON FRASER UNIVERSITY
Department of Economics

Econ 808 – MACROECONOMIC THEORY
Syllabus – Fall 2003

Prof. Kasa   Office Hours: Mon. 3:00 – 4:00
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COURSE OBJECTIVES AND PREREQUISITES

This course provides an overview of most of the core topics in macroeconomics. The goal is to learn how to apply the workhorse models of modern macro: the Solow growth model, the Cass-Koopmans and Diamond optimal growth models, recent models of endogenous growth and technological progress, Real Business Cycle models, the Lucas supply curve, the Permanent Income Hypothesis and its extensions, Tobin's q-theory of investment, the Mortensen-Pissarides search model of unemployment, Kydland and Prescott's model of dynamic inconsistency, Barro's tax-smoothing model, and Ricardian Equivalence. The focus will be on theory, but students should be able to understand and interpret empirical work as well.

There are three major omissions from the course. First, monetary theory is not covered. Money is either exogenous or abstracted from entirely. Second, most of the models implicitly assume a complete markets/representative agent structure. Third, recent developments in New Keynesian macro will not be covered very extensively. Monetary theory, incomplete markets, and sticky price models are covered in Econ 809.

COURSE STRUCTURE

The course is divided into three main parts. The first part covers growth theory, the second part covers business cycles, and the third part covers government policy. Since the class may contain a mixture of MA and PhD students, the technical level of the material may at times be a bit difficult for MA students and a bit too easy for the PhDs. MA students are only responsible for the material in the textbook and a few additional articles. PhD students who are preparing for the macro comp are responsible for all the readings. The exams and problem sets will be the same for both groups of students.

COURSE EVALUATION

		Weight in Grade
Problem Sets	–	30%
Midterm exam **(Tuesday, October 21)**	–	35%
Final exam **(date to be arranged)**	–	35%

The only way to learn macro is to do macro. Therefore, a key part of this course is a sequence of (approximately) bi-weekly problem sets. Students are encouraged to work in groups, but everyone must turn in their own copy. The problem sets are available as PDF files on the class webpage (at www.sfu.ca/~kkasa/).

COURSE MATERIALS

There is one required book for this course: *Advanced Macroeconomics*, by David Romer (2nd Edition, 2001) published by McGraw-Hill. There are also a number of journal articles, working papers, and supplementary notes that are available for download on the course webpage. PhD students are encouraged to obtain a copy of Ljungqvist and Sargent's text, *Recurseive Macroeconomic Theory*, particularly since this is the likely text for Econ 809. Ljungqvist and Sargent is more advanced than Romer's book. It is a good source for additional material on dynamic optimization, incomplete markets, and monetary theory. Also recommended is Carl Walsh's recent text, *Monetary Theory and Policy*, which is a good source for New Keynesian models. Sargent's classic texts *Macroeconomic Theory* and *Dynamic Macroeconomic Theory*, both published in 1987, are still useful and still in print. Finally, for a more rigorous and technical presentation of growth theory, students should consult Barro and Sala-i-Martin's text, *Growth Theory*.

Romer's book is available at the campus bookstore and on reserve at the library.

COURSE OUTLINE AND READINGS

Readings marked with a (*) are not required for the MAs, but should be read by the PhD students.

I. BACKGROUND AND OVERVIEW (2 lectures)

Sept. 2-4   –   **No Class (Econ 798 meets instead)**

Sept. 9   –   **Introduction and Overview**
Sargent (1980), "Rational Expectations and the Reconstruction of Macroeconomics"
* Lucas (1976), "Econometric Policy Evaluation: A Critique"
Sargent (1984), "Autoregressions, Expectations, and Advice"

Sept. 11   –   **Dynamic Optimization Review: Euler Equations, Bellman Equations, and Hamiltonians**
Obstfeld (1992), "Dynamic Optimization in Continuous-Time Economic
    Models: A Guide for the Perplexed"
Stokey (2003), "Introduction to Optimal Control"

II. GROWTH THEORY (5 lectures)

Sept. 16   –   **Solow Model Review/Intro. to the Cass-Koopmans Model**
Romer, Chpt. 1 and Chpt. 2 (pgs. 47-55)

Sept. 18   –   **The Cass-Koopmans Model**
Romer, Chpt. 2 (pgs. 55-74)

Sept. 23   –   **The Diamond Model**
Romer, Chpt. 2 (pgs. 75-90)
Problem Set 1 due in class

Sept. 25 – **Endogenous Growth**
Romer, Chpt. 3 (pgs. 98-125, 133-138)
Romer (1994), "The Origins of Endogenous Growth
* Lucas (1988), "On the Mechanics of Economic Development"
* Romer (1986), "Increasing Returns and Long-Run Growth"
* Mankiw, Romer & Weil (1992), "A Contribution to the Empirics of Economic Growth"
* Lucas (1990), "Why Doesn't Capital Flow from Rich to Poor Countries?"

Sept. 30 – **Endogenous Growth**
Romer, Chpt. 3 (pgs. 143-160)
* Prescott (1998), "Needed: A Theory of Total Factor Productivity"
* Parente & Prescott (1994), "Barriers to Technology Adoption and Development"
* Parente & Prescott (1999), "Monopoly Rights: A Barrier to Riches"

III. BUSINESS CYCLES (4 lectures)

Oct. 2 – **Business Cycle Facts and Methodology**
Romer, Chpt. 4 (pgs. 168-174)
Lucas (2003), "Macroeconomic Priorities"

Oct. 7 – **The Basic Real Business Cycle Model**
Romer, Chpt. 4 (pgs. 174-196)
Plosser (1989), "Understanding Real Business Cycles"
* Prescott (1986a), "Theory Ahead of Business Cycle Measurement"
* Summers (1986), "Some Skeptical Observations on Real Business Cycle Theory"
* Prescott (1986b), "Response to a Skeptic"
Problem Set 2 due in class

Oct. 9 – **Extensions of RBC Models: The Labor Market and Fiscal Policy**
Hansen & Wright (1992), "The Labor Market in Real Business Cycle Theory"
McGrattan (1994), "A Progress Report on Business Cycle Models"
* Christiano & Eichenbaum (1992), "Current Real Business Cycle Theories and
Aggregate Labor Market Fluctuations"

Oct. 14 – **Further Extensions of RBC Models/Criticisms of RBC Models**
Romer, Chpt. 4 (pgs. 196-212)
* Backus, Kehoe & Kydland (1992), "International Real Business Cycles"
* Burnside, Eichenbaum & Rebelo (1993), "Labor Hoarding and the Business Cycle"
* Cogley & Nason (1995), "Output Dynamics in Real Business Cycle Models"

IV. MISCELLANEOUS TOPICS (6 lectures)

Oct. 16 – **The Lucas Supply Curve**
Romer, Chpt. 6 (pgs. 265-279)

Oct. 21 – **Midterm Exam (Closed Book)**
Problem Set 3 due in class

Oct. 23   –   **Consumption: The Permanent Income Hypothesis**
Romer, Chpt. 7 (pgs. 330-348)

Oct. 28   –   **Extensions of the Permanent Income Hypothsis**
Romer, Chpt. 7 (pgs. 348-362)

Oct. 30   –   **Investment: Tobin's Q**
Romer, Chpt. 8 (pgs. 367-391)

Nov. 4   –   **Investment and Financial Market Imperfections: The Financial Accelerator**
Romer, Chpt. 8 (pgs. 392-405)
Problem Set 4 due in class

Nov. 6   –   **Unemployment: The Mortensen-Pissarides Model**
Romer, Chpt. 9 (pgs. 410-412 and 444-453)
   *   Shimer (2003), "The Cyclical Behavior of Equilibrium Unemployment and Vacancies"

V. MONETARY AND FISCAL POLICY (5 lectures)

Nov. 11   –   **No Class (Remembrance Day)**

Nov. 13   –   **Inflation, Money Growth, and Interest Rates**
Romer, Chpt. 10 (pgs. 468-478 and 510-524)

Nov. 18   –   **The Time Inconsistency of Optimal Monetary Policy**
Romer, Chpt. 10 (pgs. 478-482)
Kydland & Prescott (1977), "Rules Rather than Discretion: The Inconsistency
      of Optimal Plans"
Problem Set 5 due in class

Nov. 20   –   **Dealing with Time Inconsistency**
Romer, Chpt. 10 (pgs. 483-492)
   *   Barro & Gordon (1983), "Rules, Discretion and Reputation in a Model of
      Monetary Policy"
   *   Stokey (2002), "Rules vs Discretion After Twenty-five Years"
   *   Alvarez, Kehoe & Neumeyer (2003), "The Time Consistency of Monetary and
      Fiscal Policies"

Nov. 25   –   **Fiscal Policy: Ricardian Equivalence**
Romer, Chpt. 11 (pgs. 530-541)

Nov. 27   –   **Fiscal Policy: Tax-Smoothing**
Romer, Chpt. 11 (pgs. 541-547)
   *   Aiyagari et al. (2002), "Optimal Taxation without State-Contingent Debt"

Dec. 3-12   –   **FINAL EXAM (exact date not yet decided)**
Problem Set 6 due