THE GEORGE WASHINGTON UNIVERSITY
Department of Economics

ADVANCED MACROECONOMIC THEORY I Fall Semester 2011
ECON 305 Section **10, CRN** 92284, Macroeconomic Theory I, **3.0** credits
Wednesday, at **05:10pm-07:00pm/07:10pm-9:00pm Funger 222**

Professor Fred Joutz Hall of Government 313, (202) 994-4899, fax 994-6147 [bmark@gwu.edu]
Office Hours: Tuesday and Wednesday 3pm-4pm, after class, and by appointment.
Graduate Assistant: Regina Astrid Martinez Fernandez ram76@gwmail.gwu.edu OH Tuesday 3-5pm, Tuesdays, in the John Kendrick Seminar Room (MON 321)

Course Description

This is a first semester course in graduate macroeconomic theory. The course will explore the basic models and analytical techniques in macroeconomic theory, beginning with simple deterministic static models, extending to dynamic intertemporal (growth) models and finishing with stochastic models.

There are a broad range of topics in macroeconomic theory. We will not be able to cover all of them in the introductory semester. We will examine models of short-run fluctuations and the long-run performance of the economy. Policy issues in macroeconomics will be introduced, but much of that material will be saved for the following semesters. While I hope to provide you with some introduction to numerical techniques, we will not go into great detail on numerical solutions to calibrated models. This material will be covered in subsequent semesters. Where possible, data primarily from the United States will be used to illustrate simple relationships.

Grading

Problem Sets	30 points	
Test One	30 points	Date TBA
Final Exam	40 points	
Total Points	100 points	

Grades are based on a curve and derived from a weighted score from the total possible points. You will receive four problem sets. They will be passed out at least one week before they are due. They will not be accepted late. Make-up tests are only offered in the case of medical emergencies. If you miss the mid-term for another reason, the final exam will be worth 80% of your grade.

Academic Integrity: All graded work must be completed in accordance with The George Washington University Code of Academic Conduct. Plagiarism in any form is a violation of this Code. Examples of plagiarism include:

- buying or borrowing a paper;
- copying a paper entirely or in part from any source;
- summarizing a source without adequate citation;
- using thoughts (including wording) belonging to someone else without citation, etc.

- It is also a violation of the Code if the research paper has been used in its entirety in another class. (A previous paper of yours may be the basis for further research, but you must discuss this with me in advance).

A violation of the Code results in a grade of F, notification of the Office of Academic Integrity, and a possible hearing before the Academic Integrity Council. All students must read the Code of Conduct. check the web-site at http://www.gwu.edu/~ntegrity/code.html .

Disability: Any student who feels he/she may need an accommodation based on the impact of a disability should contact the Disability Support Services office in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information, please refer to http://gwired.gwu.edu/dss/

Required Textbook(s)

Romer, David; Advanced Macroeconomics. New York: McGraw-Hill. Fourth edition, 2012.

Adda, Jerome and Russell Cooper; Dynamic Economics: Quantitative Economics and Applications, MIT Press, 2003.

Williamson, Stephen D.; Macroeconomics: 2nd edition, Pearson Addison-Wesley, 2005.

The textbooks below may be helpful at various points in the semester, your graduate studies, and your career.

Graduate Textbooks

Blanchard, Olivier Jean and Stanley Fischer; Lectures in Macroeconomics, the MIT Press, 1989.
McCandless, George T. and Neil Wallace, Introduction to Dynamic Macroeconomic Theory: An Overlapping Generations Approach, Harvard University Press, 1991.
Ljungqvist, Lars and Thomas Sargent , Recursive Macroeconomic Theory, MIT Press, 2001.
McCafferty, Stephen; Macroeconomic Theory, Harper and Row, 1990.
Sargent, Thomas J., Macroeconomic Theory second edition Academic Press Inc., 1987.
, Rational Expectations and Inflation, Harper and Row Publishers, 1986.
Attfield, C.L.F., D. Demery, and N.W. Duck, Rational Expectations in Macroeconomics: An Introduction to Theory and Evidence, Basil Blackwell Ltd. second edition, 1991.
Branson, William H., Macroeconomic Theory and Policy, third edition, Harper & Row, Publishers, Inc., 1989.

Useful Undergraduate Textbooks

Abel, Andrew and Ben Bernanke; Macroeconomics, Addison-Welsley.
Blanchard, Olivier; Macroeconomics, Prentice Hall.
Gordon, Robert; Macroeconomics, Scott Foresman Little and Brown.
Hall, Robert E. and John B. Taylor; Macroeconomics: Theory, Performance, and Policy, Norton.
Jones, Charles; Introduction to Economic Growth, Norton, 1997.
Mankiw, Gregory; Macroeconomics, McGraw-Hill.

Additional Comments

As a first theory course, we will spend time building our analytical toolkits and this means concentration on mathematical analysis. Since we are economists and not mathematicians we must understand why the mathematical tools are appropriate and what the results imply. There are three ways to develop and analyze an economic issue. They are: an intuitive explanation, graphical, and mathematical. You can firmly understand an issue by trying to explain it using the three tools. Consider them the legs of a stool.

Studying in pairs or groups is highly encouraged. Frequently having to explain a theoretical point to a peer or to discuss an issue with one is the best way to learn the material. If you work on the problem sets in a group, please turn in a single copy of the answers with the names of the contributors. Each person will receive the same score.

Rough Course Outline: This may modified and or augmented

I. Models of Economic Growth
(Williamson Text chapters 6 and 7 and Romer Chapters 1-3)

A. The Solow Growth Model
B. Endogenous Growth Theory

II. A Simple Dynamic Macro Model
(Williamson Notes pp 1-17, pp 18-23, Williamson Text Chapters 2,5, 8 and 9)

A. Behavior of the Representative Consumer
B. Behavior of the Representative Firm
C. Equilibrium and The Model Economy
D. The Consumers Optimization Problem
E. Competitive Equilibrium
F. Ricardian Equivalence

III. The Overlapping Generations Model
(Williamson Notes pp 18-23 and Romer pp 77-100)

A. The Basic Structure
B. The Social Planners Problem
C. The Competitive Equilibrium

V. Dynamic Programming Models
(Williamson Notes pp 39-49 and handouts)

A. Introduction to Dynamic Programming
B. Finite Horizon Problems
C. Infinite Horizon Problems
D. Economic Problems in Discrete Time

VI. Nominal Rigidities an d Microeconomic Foundations Romer Ch 6

A. Fixed and Rigid Prices
B. Lucas Imperfect Information Models
C. New Keynesian Economics