

THE GEORGE WASHINGTON UNIVERSITY
Department of Economics
Spring 2012

66583 ECON [2104](#) 10 Intermediate Macroeconomics: Mathematical
[ROME](#) 459 TR 08:00AM - 09:15AM

Professor Joutz

Office Hours: T and R 11:15am - 12:15am and by appointment

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Course Description: This course will focus on understanding the movements of GDP, unemployment and inflation in the short run, the role of expectations in economic decision and policy making, and the determinants of economic growth. This will be accomplished by constructing simple macroeconomic models which attempt to explain real world phenomenon. Data, primarily from the United States, will be used to illustrate simple relationships. Long run relationships, policy issues, and the interdependence of the domestic economy with the rest of the world will be discussed.

This is the first time the course in quantitative macroeconomics is being offered. I do not have a good template for how to teach the course. I have looked for similar courses on the web, but have not found one either. Thus I am trying to develop the breadth and depth of material to cover.

I have taught intermediate macroeconomics and a first semester PhD level macroeconomic theory course for nearly two decades. My research has primarily been in empirical macroeconomics and energy economics. The topics I have examined include long-run growth issues and business fluctuations in the US, OECD countries, and emerging economies.

I see three alternative paths to teaching the course. These paths can serve the needs of different students. The first path is one which could prepare students for graduate school in economics or finance. This course would be very theoretical and technical mathematically. Real world data applications, and some might say real world relevance would be minimized.

The second path would not be as theoretical and less technical mathematically. But it would stress learning empirical tools, possibly some econometrics, to illustrate and understand macroeconomic relationships and theoretical concepts. This type of course would be best for students who are not (immediately) interested in going beyond the BA/BS. It would equip them with the background, skills, and tools useful in business, government, and policy think tanks.

I do not feel either of these paths is optimal in terms of delivering or meeting students needs at the class level or individual level. I prefer a more rounded approach to teaching a

course in quantitative macroeconomics. This third path is a linear combination of the first two paths. However, I can say that I do not necessarily know the optimal weights for the approaches in the two paths and or best way to present the material and teach the skills.

Course Prerequisite: Students are assumed to have taken Microeconomics at the Intermediate level (ECON 103) Do not try to take the course without that background.

Required Textbook:

Advanced Macroeconomics, 4th edition, David Romer, McGraw-Hill-Irwin Publishers, 2012, ISBN 978-0-07-351137-5. (RO).

Macroeconomics: Imperfections, Institutions & Policies, Wendy Carlin and David Soskice, Oxford University Press, 2006, ISBN 978-0-19-877622-2. (CS).

Additional Comments: The study of economics is a cumulative one. The pace will be rapid. You will be expected to have read the material relevant to each lecture. Do not save it for the last minute, because it is too much to absorb. If you are unsure, do not hesitate to ask me about your reading assignments. 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.

My teaching style is to provide a review of the theory in the book and then ask applied problems. 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. In addition, you can benefit from meeting people and making friends.

We will be using the Blackboard system in the course. It will be used to disseminate lecture notes, problem sets, pose questions in discussion groups, and communicate via e-mail. All students are expected to log into the course site.

Learning Outcomes—

1. Students will be able to use the terminology of macroeconomics to analyze issues related to macroeconomic growth and fluctuations or business cycles.
2. This a quantitative course. It will incorporate theoretical and empirical tools. Students will learn the terminology and analytical tools for analyzing macroeconomic issues.
3. Students will be able to collect, analyze and present macroeconomic data, attempt to test hypotheses, and illustrate fundamental relationships..

Grading

Problem Sets	40%
Quizzes	30%
Final Test	30%

There will be six problem sets; they will be worth 8 points each toward your final grade. Your five highest scores from the problem sets will count toward your final grade. You may miss one problem set or drop your lowest score. Problem sets account for 40 points of your final grade. They will not be accepted late. If you miss class, e-mail it as a pdf file or fax it to (202) 994-6147. The problem sets can be worked on together. In fact, it is encouraged. If you work in a small group, only submit one set of answers.

There will be six quizzes; they will be worth 6 points each toward your final grade. Your five highest scores from the short quizzes will count toward your final grade. You may miss one quiz or drop your lowest score. The quizzes will be announced in advance and given at the start of class. Do not be late. The total points on quizzes you can earn are 30 points toward your final grade.

A make-up quiz or test is only offered in the case of documented family or medical emergencies. Grades are made on a curve and based on a weighted score of the total possible points. You will receive problem sets approximately one week in advance.

The final exam is worth 30 points.

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/>

Rough Course Outline - The outline is very optimistic. I will be providing readings and instructional materials on Blackboard. Textbook readings are in parentheses. There will be additional files placed on Blackboard as readings.

Part I: Measurement in Macroeconomics (National and Regional)

- National Income and Product Accounts
- Employment
- Financial Markets
- Fiscal and Monetary Variables

Part II: Economic Growth I (RO-1, CS-13)

- Neoclassical or Solow Growth Model
- Stability Conditions and Growth
- Growth Accounting

Part III: Economic Growth II (RO-3, CS-14)

- Endogenous Growth Models
- AK Models
- Knowledge Production Functions
- Stability and Convergence

Part IV: Consumption and Investment

- Consumption (RO-8, CS-7)
- Investment (RO-9, CS-7)
- Labor Markets (RO-10, CS-4)

Part V: Short-Run Fluctuations (Romer reading files, CS2-5, 9-11)

- IS-LM
- IS-MP-IA
- Open Macroeconomy
- Uncovered Interest Parity
- Flexible vs. Fixed Exchange Rates

Part VI: Rational Expectations Models (RO-6, RO-7, RO-11, CS various)

- Consumption Behavior
- Policy Effectiveness Proposition
- Time Inconsistency
- Dynamic Neo-Keynesian Models