ECON 5312
Macroeconomic Theory

Spring 2013	Prof. C.Y. Choi
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Department of Economics	Tel: (817)272-3860
Office Hrs: M,W 3:00-4:00 p.m.	e-mail: cychoi@uta.edu
Class Hrs: M,W 5:30-6:50 p.m.	Classroom: COBA 254

"People confuse economists and economic policy.
Economists agree about economics – and that's a science –
and they disagree about economic policy because that's a value judgment...
I've had profound disagreements on policy with the famous Milton Friedman.
But, on economics, we agree."
- *Franco Modigliani* (1985 Nobel Laureate in Economics)

"In the late 1970s, Thomas Sargent and Robert Lucas argued that conventional macroeconomic methods were 'fatally flawed': since then macroeconomics has become a most exciting part of our discipline. After all, it is stimulating to be involved in the very initiation of a new research agenda. But while all this activity has been exciting for researchers in the field, it can be frustrating for students and their instructors."
- *William M. Scarth*

"Macroeconomics is a science with excellent tools for gaining answers but a serious shortage of interesting questions."
- *Steve Levitt*

"Steve must have skipped his classes in macroeconomics. We macroeconomists have a serious surplus of interesting questions but inadequate tools for gaining answers."
- *Greg Mankiw*

"I have no data yet. It is a capital mistake to theorize before one has data. Insensibly one begins to twists facts to suit theories, instead of theories to suit facts."
- *Sherlock Holmes, A Scandal in Bohemia (Sir Arthur Conan Doyle)*

Course Objectives and Description:

As the core course of graduate macroeconomics, this class is intended to provide a solid foundation for contemporary macroeconomic theory and application. Given the breadth and depth of the field, we are restricted to focus on selected *workhorse* models although it is widely agreed that there is no generally accepted broad consensus in macroeconomics. Following the most general level macroeconomics, the course is structured into three main parts. We will start the semester with an overview of macroeconomics and stylized facts. We then proceed to cover the IS-LM and AD-AS models as a general framework for macroeconomic analysis. The second part is devoted to the analysis of *dynamics* and *stochastics* in modern macroeconomic models. Topics in this second part include: rational expectations, real business cycle models, and an introduction to the New Keynesian Macroeconomics. In the last part, we will discuss economic growth including the basic neoclassical models that has drawn enormous attention from researchers in the past decade or so.

By the end of the course, students are expected to (1) be familiar with classic articles and the current frontiers of economic knowledge in the field of macroeconomics; (2) be equipped with important tools needed to read and do research modern macroeconomics; and (3) be aware of sources of macroeconomic data.

Course Prerequisites:

The prerequisites for this course are (1) Intermediate Macroeconomics (ECON 3312 or the equivalents); (2) working knowledge of calculus, matrix algebra, and basic statistics; (3) a **strong desire** to learn.

The instructor assumes you have previously mastered the material typically presented in intermediate macroeconomics courses. If you are not sure about it, please refresh your memory of the knowledge obtained from earlier training in macroeconomics. You may find it useful to consult one of the following intermediate macroeconomics texts:

- *Abel, Andrew B. and Bernanke, Ben S., *Macroeconomics*, any edition, Addison-Wesley.
- *Blanchard, Olivier J., *Macroeconomics*, any edition, Prentice Hall.
- Jones, Charles, *Introduction to Economic Growth*, any edition, Norton Publisher.
- *Mankiw, Gregory N., *Macroeconomics*, any edition, Worth Publishers.
- Williamson, Stephen, *Macroeconomics*, any edition, Pearson Publishers.

All the models in the book can be analyzed with pen and paper. However, you'll need a basic understanding of matrix algebra and calculus especially when we discuss dynamic/stochastic macroeconomic models. The following references will be helpful to teach yourself in those areas:

- *Chiang, Alpha C., *Fundamental Methods of Mathematical Economics*, 3rd ed., McGraw-Hill, 1984.
- Chiang, Alpha C., *Elements of Dynamic Optimization*, McGraw-Hill, 1992.

Course Material:

There is **no** required textbook for this course mainly because no one textbook can exactly matches the material covered in class. However, the following references will be extensively used throughout the course. Also I will try to make lecture notes available from time to time which will complement your class notes and other reading. Beware that the lecture notes are only meant as a guide to the course and they should be integrated with the other readings and with regular attendance to the course. The books asterisked (*) either are on reserve or will be on reserve in the central library.
I also highly recommend reading *the Economist magazine* and *the Wall Street Journal* on a regular basis as they are very good sources of current information on economic matters of all kinds. Their coverage of macro stories gives you an opportunity to see how theories actually play out in the real world.

- *Romer, David, *Advanced Macroeconomics*, any edition, McGraw-Hill, 2001. (hereafter **DR**)
- Scarth, William M., *Macroeconomics: An Introduction to Advanced Methods*, 2nd ed., Dryden, 1996. (hereafter **SW**)

- *Snowdon, Brian, Vane, Howard, and Wynarczyk, Peter, *A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought*, Edward Edgar Publishing Company, 1994. (hereafter **SVW**)

If you feel like learning macroeconomic beyond the level of our course, the following graduate texts are recommended.

- Aghion, Philippe and Howitt, Peter, *Endogenous Growth Theory*, MIT Press, 1998.
- Barro, Robert J. and Sala-i-Martin, Xavier, *Economic Growth*, 2nd ed., MIT Press, 2004.
- Blanchard, Olivier J. and Fischer, Stanley, *Lectures in Macroeconomics*, MIT Press, 1989.
- Cooley, Thomas F. (ed.), *Frontiers of Business Cycle Research*, Princeton University Press, 1997.
- Ljungqvist, Lars and Sargent, Thomas J., *Recursive Macroeconomic Theory*, MIT Press, 2000.
- McCallum, Bennett T., *Monetary Economics: Theory and Policy*, Macmillan, 1989.
- Obstfeld, Maurice and Rogoff, Kenneth, *Foundations of International Macroeconomics*, MIT Press, 1996.
- Taylor, John B. and Woodford, Michael, eds, *Handbook of Macroeconomics - vols 1A-C*, Elsevier, 1999.
- Turnovsky, Stephen J., *Methods of Macroeconomic Dynamics*, 2nd ed., MIT Press, 2000.
- Woodford, Michael, *Interest and Prices: Foundations of a Theory of Monetary Policy*, 1st ed., Princeton University Press, 2003.

Course Website:

The course website is available in the UTA Blackboard interface (http://elearn.uta.edu). Copies of the syllabus, problem sets, supplemental readings, and other class related information will be posted on the course website. The relevant academic articles are available either on the JSTOR website (http://www.jstor.org) or in the central library.

Evaluations:

Problem Sets	5 assignments	20%
1st mid-term	February 27, Wednesday (*tentative*)	25%
2nd mid-term	April 10, Wednesday (*tentative*)	25%
Final Exam	May 6, Monday (5:30-8:00pm)	30%
Class participation	throughout semester	10%

- Problem Sets: Late work will not be accepted under any circumstances.
- Exams: There will be two mid-term and a final exams. All exams are closed book and closed notes and will be given at the scheduled time. Final exam is **comprehensive**.

Other Issues:

- **Academic Integrity:** It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.
  "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22)
  No unauthorized assistance may be used when taking exams. Any academic dishonesty will result in a grade of "F" for the course.

- **Americans with Disabilities Act:** If a student requires an accommodation based on disability, the student should meet with the instructor in his/her office during the first week of the semester. As a faculty member, I am required by law to provide "reasonable accommodation" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.

- **Bomb Threats:** If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

- **College Policy:** Students who have not paid by the census date and are dropped for non-payment cannot receive a grade for the course in any circumstances. A student dropped for non-payment who continues to attend the course will not receive a grade for the course. Emergency loans are available to help students pay tuition and fees through the Bursar's Office.

- **Drop Policy:** It is the student's responsibility to complete the course or withdraw from the course in accordance with University Regulations. Students are strongly encouraged to verify their grade status before dropping a course after the first withdrawal date. A student who drops a course after the first withdrawal date may receive an "F" in the course if the student is failing at the time the course is dropped. (**March 29, 2013 is the last drop date**)

- **Evacuation Procedures:** In the event of an evacuation of the College of Business building, when the fire alarm sounds, everyone must leave the building by the stairs. With the fire alarm system we now have, the elevators will all go to the first floor and stay there until the system is turned off.
  FOR DISABLED PERSONS..please go to the Northeast fire stairs. We have an evacuation track chair located on the 6th floor stairwell. We have people trained in the use of this chair and there will be someone that will go to the 6th floor to get the chair and bring it to any lower floor stairwell to assist disabled persons.

- **E-Culture Policy:** The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.
When you contact me via e-mail, please make sure that your full name with proper capitalization and **'ECON 5312'** appear in the *'Sender'* and in the *'Subject'* line. Due to the concern on computer viruses, I often delete suspicious e-mails without even opening them.

- **Grade Grievances:** You have one calendar year from the date the grade is assigned to initiate any grievance. The normal academic channels are department chair, academic dean, and the Provost.
- **Student Support Services:** The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

Course Outline:

The course is organized in seven large sections. For each topic, I have included basic readings which come from selected textbooks. Relevant academic journals will be posted on the web.

1. An Overview of Macroeconomics and Stylized Facts: 3 Meetings
   - **DR**, ch.5.4-5.6; **SW**, ch.1; **SVW**, ch.1
   - Two primary topics of macroeconomics
   - Cyclicality of macroeconomic variables
   - Review of macroeconomic variables (GDP, inflation, unemployment)
   - The Circular Flow of Income: Basic setup of macroeconomic models
   - Main stylized facts of the business cycle
   - The Chronology of macroeconomics (By Schools of Thoughts)
2. A General Framework for Macroeconomic Analysis: 5 Meetings
   - **DR**, ch.5.1; **SW**, ch.2,3; **SVW**, ch.3
   - The Classical macroeconomic model
   - The IS-LM model
   - Supply side analysis in the Keynesian model
   - AS-AD model
   - Equilibrium in the short run and medium run using AS-AD and IS-LM analyses
3. Extended Topics with Dynamic Macroeconomic Models: 3 Meetings
   - **SW**, ch.7
   - AS relation, the Phillips Curve, and the Okun's law

- Sacrifice ratio and the Lucas Critique

4. Rational Expectations and Stochastic Macroeconomic Models: 7 Meetings
   - **DR**, ch.7,8; **SW**, ch.5,6; **SVW**, ch.5
   - New Classical Macroeconomics (NCM) and counter-revolution
   - Rational expectations (RE) and the Policy Ineffectiveness Proposition
   - Time inconsistency and optimal policy
   - Ricardian Equivalence
   - Efficient Market Hypothesis (EMH)
   - Intertemporal choice model focusing on Consumption
   - Consumption model under (un)certainty
   - Asset Pricing Model
5. Real Business Cycle (RBC) Models and New Keynesian Macroeconomic Models: 4 Meetings
   - **DR**, ch.4,6,11; **SW**, ch.10,11.2; **SVW**, ch.6,7
   - Basic RBC models
   - New Keynesian Phillips Curve (NKPC)
   - Inflation and Monetary Policy
6. Economic Growth Theories: 6 Meetings
   - **DR**, ch.1,2,3
   - Stylized facts about economic growth
   - The Solow Growth Model
   - Simple endogenous growth model