Monetary and Fiscal Policy

Econ 243

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Spring 2020
T-Th 1:30-3:00
Room: MCNB 309

This course is an advanced course on monetary and fiscal policy. You will be expected to understand models of the economy and to use them to address some fundamental questions concerning macro policy. The course assumes a fairly high level of analytic sophistication. One of the aims of the course it teach you both the standard analytic methods (like Lagrangians) and the computational methods commonly used in economics. We will largely teach all this from scratch but I will expect that you to know calculus, probability theory, and statistics as per the requirements for the course. Since most major policy questions are quantitative, the course has a large quantitative component. One important part of this will be the required computational assignments.

T.A.: Our T.A. , Xiaoliang Wang, will be holding regular office hours. He will also hold special recitations on key topics, as well as review sessions before the midterm and the final. Currently we are planning a calculus and optimization review recitation, a Matlab recitation, and a probability theory recitation. These will normally occur on Fridays right around the time we are covering this material. They will be announced on Canvas in advance. Xiaoliang will also announce his office hours there.

Extra Classes: For the special recitations, and because I will miss several classes, we will have some extra sessions on Fridays.

Textbook: The main text: "Monetary and Fiscal Policy through a DSGE Lens", is in the process of being published by Oxford University Press. Till it (hopefully this term) becomes available we will be using the notes that I have developed for this course, which were converted into the book. These notes can be downloaded from the course's Canvas website.
In addition, we will have supplemental readings, some of which will be posted online.
Learning to program in Matlab is a critical aspect of the course. There are many options here including some online ones which are free:

- Amos Gilat's "Matlab: An Introduction with Applications".
- http://www.maths.dundee.ac.uk/software/MatlabNotes.pdf
- Videos by Prof. Blanchard of U. of Wisconsin:

Homework: There will be regular homework assignments, and these will play an important part in the course. We are trying to understand quantitative macroeconomic models. For that reason you will be asked to program up various versions of these models in Matlab. The home works should be emailed to the T.A. before his office hours begin on their due date. This will enable him to talk over the homework assignments with you in a timely manner.

Grading: There will be 2 midterms and a final exam. The final will be in-class and on the last day of classes. The weight will be 1/4 on the homework, 1/4 on each midterm and 1/4 on the final. I will handout supplemental problems for you to work on to aid you in preparing for the exams. The exams will draw on the lectures and the supplemental readings.

Office Hours: My office hours are tentatively scheduled for Wednesdays 1:30-2:30 pm. But this will be subject to change during the semester. Please check the announcements on Canvas. If you cannot make these hours, I can make arrangements to meet with you at other times.

Computing: The class will feature computer assignments. At least one of them, and probably more, will require you to solve a system of nonlinear equations. The standard mechanism for doing so is fsolve.m, which is a component of the optimization toolbox. That toolbox can be purchased along with the student edition of matlab, see

http://www.mathworks.com/academia/student_version/details.html . Also, Matlab is available at various sites around the campus - see

http://www.library.upenn.edu/computing/laptops_labs.html .

Preliminary List of Supplemental Readings:

1. G. McCandless and W. Weber, "Some Monetary Facts," Federal Reserve Bank of Minneapolis Quarterly Review.

2. Atkeson and Kehoe, "Depression and Deflation: Is there an empirical link?," Federal Reserve Bank of Minneapolis Staff Report.

3. Cole and Kocherlakota, "Why Zero Interest Rates are Good and How to Get Them," Federal Reserve Bank of Minneapolis, Quarterly Review, Spring 1998.

4. R. King, "The Phillips Curve and U.S. Macroeconomic Policy: Snapshots, 1958-1996," Economic Quarterly of the Federal Reserve Bank of Richmond, Fall 2008.

5. Atkeson, Chari and Kehoe, "Taxing Capital Income: A Bad Idea," Federal Reserve Bank of Minneapolis Quarterly Review Summer 1999.

6. E. Prescott, "Why Do Americans Work So Much More Than Europeans?," Federal Reserve Bank of Minneapolis Staff Report 321.

Background Reading: You may find it helpful to consult a few sources for material on optimization, probability theory and computing. The obvious source are your prior textbooks. Some additional suggestions are:

1. A.K. Dixit, Optimization in Economic Theory, chapters 1-5.

2. http://jeremykun.com/2013/01/04/probability-theory-a-primer/