

**ECON 225A**  
**MONETARY ECONOMICS**  
**Fall 2009**

**Professor:** Fabio Milani, [fmilani@uci.edu](mailto:fmilani@uci.edu)

**Office Hours:** SSPA 3145, Thu 3.00-5.00 PM (or by appointment)

**Time and Location:** Tu-Th 12.30-1.50 PM, SSPB 3266.

**Course Webpage:** <http://www.socsci.uci.edu/~fmilani/econ225a.html>

**Grading:**

<b>Assignments</b>	<b>10%</b>
<b>Comment</b>	<b>10%</b>
<b>Take-Home Exam</b>	<b>60%</b>
<b>Proposal</b>	<b>20%</b>

**Course Description:** The course focuses on the derivation and estimation of monetary business cycle models. Extended versions of the models will see in class are used by policy institutions around the world as a framework to form forecasts about macroeconomic variables, judge counterfactual scenarios, and inform policy decisions. You will learn:

- to derive macroeconomic models with microeconomic foundations;
- to solve rational expectations models;
- to estimate macroeconomic models using Bayesian methods;
- to think about research issues in monetary economics and identify new research questions.

The course will start with a description of the baseline New Keynesian model. Then, we'll spend some time on extensions that consider a different modeling of expectations and adapt the model to the open economy case.

**Textbook:** There is no single textbook required for the course.

Although we won't follow a particular book, the closest in focus to the course are:

- **Gali'**, *Monetary Policy, Inflation, and the Business Cycle. An Introduction to the New Keynesian Framework.*

- **Woodford**, *Interest and Prices. Foundations for a Theory of Monetary Policy*.
- **Walsh**, *Monetary Theory and Policy*

Another book that can serve as reference for the second part of the course is

- **Obstfeld and Rogoff**, *Foundations of International Macroeconomics*

For the econometrics used in the course, these books might be useful:

- **Gary Koop**, *Bayesian Econometrics*
- **Fabio Canova**, *Methods for Applied Macroeconomic Research*
- **Dejong and Dave**, *Structural Macroeconometrics*
- **John Geweke**, *Contemporary Bayesian Econometrics and Statistics*.

Besides, there are lecture notes available on the web, which discuss the derivation and estimation of general equilibrium models similar to those that we'll discuss in class:

*Schorfheide*:

<http://www.eabcn.org/bayesian-methods-dsge-models-and-vars-course-materials#>

*Fernandez-Villaverde and Rubio-Ramirez*:

<http://www.econ.upenn.edu/~jesusfv/teaching.html>

## Assignments

There will be 3-4 homework assignments. Most of them will require you to work on Matlab to solve, simulate, or estimate models. You should try to become familiar with Matlab as soon as possible in the quarter.

## Comment

You will need to write a comment on one of the papers chosen from a list that I will assign. The comment should touch on substantive issues of the paper, identify weaknesses, propose solutions, etc.

Deadline: tba.

## Take-Home Exam

At the end of the quarter, there will be a take-home exam, in which you will be asked to estimate a model similar to one of those we will have discussed in the course, using data that I will indicate. You will have one week to turn in the exam. You should work individually on the exam and turn in your own solutions.

For those of you who choose to do so, the take-home exam can be substituted by a paper. This may be a good choice especially for students in the 3<sup>rd</sup>, 4<sup>th</sup>, and following years. The

paper should still include an estimation of a macro model and some substantive results to be acceptable.

## **Proposal**

By the end of the quarter, you will also have to write a proposal (2-5 pages) about a research idea for a paper that is related to one of the topics from the course (this can be an idea for a 2<sup>nd</sup> or 3<sup>rd</sup> year paper, for example). The proposal will be judged based on the merit, novelty, feasibility of the idea. If you have preliminary data or results, you can include them in the proposal.

## **Topics (tentative)**

- 1. Why is there Money? How to introduce Money in macro models**
  - Introduction
  - “Cashless” Economy
- 2. Empirical Evidence on the Effects of Monetary Policy**
  - VAR evidence: impulse responses to MP shocks, different identification methods.
- 3. The New Keynesian Model**
  - Assumptions
  - Derivation
  - Optimal Policy
  - Empirical Evidence on Sticky Prices: micro and macro evidence.
- 4. The New Keynesian Model: Empirical Evidence, Model Estimation**
  - Persistence
  - Volatility
  - Identification
  - Effect of MP and technology shocks.
  - Medium and large scale versions of the model.
  - Sources of Business Cycle Fluctuations
- 5. Learning in Macroeconomic Models**
  - RE vs. Learning
  - Estimation
  - Persistence and volatility
  - Topics
- 6. Behavioral Theories of the Business Cycle**
  - The News view
  - Animal Spirits
- 7. Extensions to the Open Economy: Two-Country model. Small Open Economy Model**
  - What explains the Euro-Dollar exchange rate?
  - Transmission of Foreign Shocks
  - Exchange rate dynamics

- Imperfect Exchange-Rate Pass-Through
- Sources of Business Cycle fluctuations in Small Open Economies
- Relation to VAR evidence

**8. Inflation Targeting**

- Role of Transparency and Credibility
- Central Bank communication
- IT in Emerging Market Economies

**9. Topics (if time allows): Financial Frictions, Housing**

**10. Topics (if time allows): Inflation and the Monetary and Fiscal Policy Mix**