Professor: Fabio Milani, fmilani@uci.edu
Office Hours: SSPA 3145, by appointment.

Time and Location: Th 5:00-7:40 PM, SSPA 3132.

Grading:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>10%</td>
</tr>
<tr>
<td>Paper Comments</td>
<td>10%</td>
</tr>
<tr>
<td>Take-Home Exam</td>
<td>50%</td>
</tr>
<tr>
<td>Literature Review</td>
<td>20%</td>
</tr>
<tr>
<td>Class Presentations</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Course Description:** The course will focus on the derivation, properties, and estimation of models that are used for monetary policy analysis. Extended versions of the models that we 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 introduce frictions, consider a different modeling of expectations, or 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:

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

· **Walsh**, *Monetary Theory and Policy, 2nd edition*

Another book that can serve as reference for the last part of the course (open economy) 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:


For recent research in monetary economics, we will read chapters from: *Handbook of Monetary Economics* (esp. Vol. 3) ([http://www.sciencedirect.com/science/handbooks/15734498/3](http://www.sciencedirect.com/science/handbooks/15734498/3))

**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 simulate or 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.

Literature Review

You will need to write a literature review on one of the research topics that I will assign later in the course.

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 Monetary Policy
   - Empirical Evidence on Sticky Prices: micro and macro evidence.
   - Persistence
   - Volatility
   - Identification
   - Effect of MP and technology shocks.
   - Medium and large scale versions of the model: DSGE models for policy analysis.
   - Sources of Business Cycle Fluctuations
5. Expectations Formation, Monetary Policy, and the Business Cycle
   - Monetary Policy as management of expectations
   - The News view
   - Learning
   - Animal Spirits
   - Sticky Information
6. Frictions
   - Financial and Credit Frictions
   - Housing Wealth
   - Labor Frictions
7. Monetary Policy during the Financial Crisis
   - Unconventional Monetary Policy
   - Effects of Quantitative Easing
   - Zero Lower Bound
   - Deflation
8. **Inflation and Monetary-Fiscal Policy Interactions**
   - Fiscal Theory of the Price Level

9. **Extensions to the Open Economy: Two-Country model. Small Open Economy Model**
   - Transmission of Foreign Shocks
   - Exchange rate dynamics
   - Imperfect Exchange-Rate Pass-Through
   - OMP in open economies
   - Sources of Business Cycle fluctuations in Small Open Economies
   - Relation to VAR evidence
   - Monetary Policy in Emerging Market countries

In addition, we will read (a selection of) the following chapters from the recent *Handbook of Monetary Economics (2010)*:

**Chapter 3 - Money and Inflation: Some Critical Issues**, Pages 97-153
Bennett T. McCallum, Edward Nelson

**Chapter 4 - Rational Inattention and Monetary Economics**, Pages 155-181
Christopher A. Sims

**Chapter 5 - Imperfect Information and Aggregate Supply**, Pages 183-229
N. Gregory Mankiw, Ricardo Reis

**Chapter 6 - Microeconomic Evidence on Price-Setting**, Pages 231-284
Peter J. Klenow, Benjamin A. Malin

**Chapter 7 - DSGE Models for Monetary Policy Analysis**, Pages 285-367
Lawrence J. Christiano, Mathias Trabandt, Karl Walentin

**Chapter 8 - How Has the Monetary Transmission Mechanism Evolved Over Time?**, Pages 369-422
Jean Boivin, Michael T. Kiley, Frederic S. Mishkin

**Chapter 9 - Inflation Persistence**, Pages 423-486
Jeffrey C. Fuhrer

**Chapter 10 - Monetary Policy and Unemployment**, Pages 487-546
Jordi Galí

**Chapter 11 - Financial Intermediation and Credit Policy in Business Cycle Analysis**, Pages 547-599
Mark Gertler, Nobuhiro Kiyotaki

**Chapter 14 - Optimal Monetary Stabilization Policy**, Pages 723-828
Michael Woodford

**Chapter 15 - Simple and Robust Rules for Monetary Policy**, Pages 829-859
John B. Taylor, John C. Williams

**Chapter 16 - Optimal Monetary Policy in Open Economies**, Pages 861-933
Giancarlo Corsetti, Luca Dedola, Sylvain Leduc

**Chapter 17 - The Interaction Between Monetary and Fiscal Policy**, Pages 935-999
Matthew Canzoneri, Robert Cumby, Behzad Diba

**Chapter 18 - The Politics of Monetary Policy**, Pages 1001-1054
Alberto Alesina, Andrea Stella

**Chapter 19 - Inflation Expectations, Adaptive Learning and Optimal Monetary Policy**, Pages 1055-1095
Vitor Gaspar, Frank Smets, David Vestin

**Chapter 21 - Monetary Policy Regimes and Economic Performance: The Historical
Record, 1979–2008, Pages 1159-1236, Luca Benati, Charles Goodhart

Chapter 22 - Inflation Targeting, Pages 1237-1302
Lars E.O. Svensson

Chapter 25 - Monetary Policy in Emerging Markets, Pages 1439-1520
Jeffrey Frankel