Course Description and Objectives:

This is an advanced macroeconomics theory course for Ph.D. students, with special emphasis on monetary theory and policy. The objective of this course is to introduce you to current research on monetary macro modeling, models with nominal rigidities, and monetary policy analysis. We will talk about the empirical and theoretical results that the literature has converged upon and cover the needed analytical techniques along the way.

Prequisites

This course is for Ph.D student in Economics and also available to other students as permitted by the regulations. Students are also expected to have completed Econ 5250 or equivalent courses that covers DSGE models and dynamic optimization.

Learning Outcomes – School Intended Learning Outcomes (“SILOs”):

Upon successful completion of this course, you should be able to:
1. Have an up-to-date and in-depth knowledge of advanced macroeconomics, especially monetary economics. Understand the important questions of monetary economics and the main components of business cycle and monetary theories. (SILO # 1)
2. Grasp the advanced mathematical and quantitative tools to understand the important macroeconomic research questions discussed in the literature; (SILO # 1.2, #1.3)
3. Apply the concepts, principles, and models learnt in this course to analyze economic phenomena and the current macroeconomic events and its impact on the business environment and the economy; (SILO # 2.2)
4. Develop new research questions independently based on the literatures and current macroeconomic phenomenon; and carry out research independently to address these questions; (SILO # 4.1)
5. Apply monetary theories and models to understand and evaluate the effects of monetary policies, possible effects and causes of recent financial crisis, and financial and monetary policies that may stabilize fluctuations. (SILO # 2.2)
6. Think critically and creatively when making effective economic decisions and policy suggestions supported by macroeconomic theories and analytical and quantitative techniques. (SILO # 1.3)
7. Communicate effectively in oral and written English; (SILO # 5, SILO # 6.1 )
8. Demonstrate proficiency in using mathematical, quantitative and empirical tools in conducting economics research; (SILO # 3.2, #3.3)
9. Locate, gather, and analyze data using appropriate information technology, software and systems.

For the details of SILOs, please refer to: http://www.bm.ust.hk/sbmlearn/eng/thirdcat.php?sid=5&thirdid=8

**Teaching Approach**

This course is primarily delivered through lectures, tutorials, and class discussion.

<table>
<thead>
<tr>
<th>Teaching and Learning Activities</th>
<th>Roles in the Course</th>
<th>Course Learning Outcome addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures with in class discussions</td>
<td>Explain key concepts and models to students</td>
<td>1, 2, 3, 4, 5, 6, 7, 8,9</td>
</tr>
<tr>
<td>Homework assignments</td>
<td>Practice problem solving, data collection and apply models to analyze economic issues</td>
<td>1,2,3,5,7,8,9</td>
</tr>
<tr>
<td>Referee Report (Ph.D students only)</td>
<td>Understand research questions, practice critical review on papers</td>
<td>1,2,3,4,6,7,8</td>
</tr>
<tr>
<td>Class Presentation</td>
<td>Understand important papers, presentation skills</td>
<td>1,2,6,7,8,9</td>
</tr>
<tr>
<td>Exams</td>
<td>Problem solving and understanding of course materials</td>
<td>1,2,3, 5,7,8</td>
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**Evaluation**

There will be a set of assignments (20%), a mid-term (35%), and a final exam (45%).

**Required Textbook:**

There is no single source that could usefully act as a textbook for the whole course.

For the first half of this course, the **require textbook** is *Walsh, Carl, Monetary Theory and Policy, 4/e, MIT Press, 2017*. For the rest of this course, we will focus on journal articles and working papers that will be listed in the course outline. Other **useful reference** includes:


**Syllabus**

The syllabus for the course is below. Some articles may be added at a later date.

1. **Empirical evidence on Money, Prices, and Output**

Walsh, Chapter 1


Wu, J.C., and F. D. Xia, 2016, “Measuring the Macroeconomic Impact of Monetary Policy at the Zero Lower Bound.” Journal of Money, Credit, and Banking 48(2-3), 253-29120
2. Dynamic General Equilibrium Monetary Models

2.1 Money-in-Utility Model (Walsh Chapter 2)
2.2 Money and Transaction: Cash-in-Advance Model (Walsh Chapter 3)

Woodford, M. Interest and Prices

3. Money in the Short Run: Informational and Portfolio Rigidities

3.1 Imperfect Information (Lucas Island Model),
3.2 Limited Participation Model

Walsh, Chapter 5
Woodford, Chapter 3


4. Money in the Short Run: Nominal Price and Wage Rigidities

4.1 Fischer and Taylor Model
4.2 CKM model and Calvo Model
4.3 Time dependant Model and State dependant Model

Walsh, Chapter 7


Taylor, J. (1999),”Staggered Price and Wage Setting in Macroeconomics", in Taylor and Woodford, eds. Handbook of Macroeconomics,


5. **Optimal Monetary Policy with Sticky Prices: New Keynesian Monetary Economics**

Walsh, Chapter 8
Woodford, Michael, Interest and Prices:


6. **Time Consistency and Policy**

Walsh, Chapter 6


Ireland, P. “Sustainable Monetary Policies”, 1997, Journal of Economic Dynamics and Control,


7. Financial Markets and Monetary Policy

Walsh Chapter 10


8. Money and the Open economy (optional, if time permits)

Walsh, Chapter 9


**Remark:** Depending on our progress, we may or may not cover all these topics. Time constraints will force us to deviate at times.

**Presentation Schedule:**


