TOPICS IN MONETARY ECONOMICS  
ECO6181  
WINTER 2018

Professor: Francesca Rondina
Course schedule: Thursday, 2:30-5:30 pm
Course location: FSS 9003
Office: FSS 9058
Office hours: Wednesday, 11:45-12:45 and 3:30-5:00 pm
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Changes in the schedule: The class on Thursday, January 11th, is cancelled. The make-up class will be held on Sunday, January 21st, from 11:30 am to 2:30 pm in FSS 9003.

COURSE DESCRIPTION

Official Course Description: Coverage of one or more areas of current research on the frontiers of monetary economics. This course is equivalent to ECON 5607 at Carleton University.
Course Component: Lecture

This is a graduate-level course in Monetary Policy analysis. The course aims at introducing the student to a range of models developed in the empirical literature in Macroeconomics, which will then be used to examine issues related to Monetary Policy design and evaluation. A particular emphasis will be given to the discussion of the frontier of the economic research in this area.
Topics covered include: state space representation of a model, optimal and Taylor-type policy rules in dynamic linear quadratic regulator problems, monetary policy issues in models of the Phillips curve, the analysis of Monetary Policy using VAR models, robust policy-making under model uncertainty, Monetary Policy in models of learning.

GENERAL COURSE OBJECTIVES

- To get familiar with a range of empirical Macroeconomic models commonly employed in the Academic literature and in Central Banks for Monetary policy analysis;
- To discuss optimal policy-making for different types of policy rules and policy objectives;
- To learn how to setup and estimate VAR and SVAR models; to understand the economic meaning of the most common assumptions used to identify SVAR models; to study how VAR and SVAR models can be employed for Monetary policy analysis;
- To understand how robust policy-making is affected by the issue of model uncertainty; to investigate the extent to which policymakers’ information set and learning has an impact on Monetary policy decisions.
SPECIFIC OBJECTIVES and LEARNING OUTCOMES

(1) Model set up, state space representation, estimation, computation of the optimal policy.

By the end of the course, students should be able to

- write the state space representation of a model;
- identify and obtain the data needed to estimate the model of interest;
- deal with a number of common issues that might arise in the estimation of the Macroeconometric models used for Monetary policy analysis;
- compute the optimal policy rule according to policymakers’ specific loss function;
- understand the difference between fully optimal policy rule and simple (Taylor-type) policy rules.

(2) VAR and Factor models.

By the end of the course, students should be able to

- understand the relationship between reduced-form and structural VAR models,
- estimate reduced-form VAR models;
- implement the most common assumptions used to identify structural VAR models;
- use VAR models to make forecasts about the future patterns of the variables of interest and to study the response of the variables of interest to the structural shocks that affect the economy;
- understand Factor models and Factor augmented VAR (FAVAR) models;
- understand how VAR models have been employed for the analysis of the impact of news shocks and policy uncertainty shocks on the economy.

(3) Model Uncertainty and Learning.

By the end of the course, students should be able to

- examine the extent to which policymakers’ knowledge of the true model of the economy has an impact on Monetary policy outcomes;
- identify the different forms of model uncertainty that can affect the policy decision process;
- analyze the robustness properties of alternative Monetary policy rules based on a range of different approaches to model uncertainty;
- discuss the role of learning on Monetary policy decisions;
- understand model parameter updating under alternative learning algorithms.

EVALUATION

The evaluation is based on four assignments (10% each, for a total of 40%), an in-class presentation (20%) and a paper (40%).

- **Assignments.** The Assignments will assess students’ understanding of the topics covered in class, and their ability to apply these topics to the study of real world data and to the analysis of Economic research. The Assignments will consist of theoretical and empirical questions (Assignments #1 and #4), a Referee Report, and a Project Outline. The assignments are due by 5:30pm on: Feb. 1
  1st; Feb. 15
  th, Mar. 8
  th, Apr. 5
  th.

- **Presentation.** The in-class presentation will be in the typical format of an academic conference (15-20 min presentation + 5 min questions). The questions will be asked by me, and two students (other than the presenter) that will be assigned to each presentation. Students will be able to select the paper to present among a list of references that I will provide. The presentations will take place in the last 3-4 classes of the Term.

- **Paper.** The final paper should be based on the student’s own research on a topic related to the issues discussed during the course. The paper does not have to be complex, and I encourage students to focus on
small extensions of the literature covered in class. However, I do expect the analysis to be clearly presented, the methodology to be accurately described, and the results to be clearly reported and discussed. The final paper is due by 4:00pm on Thursday, April 26th.

Note: The final paper (and perhaps some of the assignments) might require the use of statistical software, which students can choose based on their preferences. To my knowledge, STATA, Eviews and Matlab are all available in the Vanier computer lab.

Policy on language quality and late submissions

Class attendance is necessary to successfully complete this course.

You will also be judged on your writing abilities. It is recommended to take the appropriate measures to avoid mistakes such as spelling, syntax, punctuation, inappropriate use of terms, etc. You may be penalized up to 15%, to the professor’s discretion.

Late submissions are not tolerated. Exceptions are made only for illness or other serious situations deemed as such by the professor. There will be a penalty for late submissions. University regulations require all absences from exams and all late submissions due to illness to be supported by a medical certificate.

Absence for any other serious reason must be justified in writing, to the academic assistants of the Faculty, within five business days following the date of the exam or submission of an assignment. The Faculty reserves the right to accept or refuse the reason. Reasons such as travel, jobs, or any misreading of the examination timetable are not acceptable.

A penalty of 5% will be given for each subsequent day following the due date (weekends not included). This goes for assignments submitted through e-mail as well, and, in this case, the time that the e-mail was received will be counted as the time of submission of the document.

We suggest that you advise your professor as early as possible if a religious holiday or a religious event will force you to be absent during an evaluation.

COURSE OUTLINE

Readings

There is no textbook for the course. Students are required to read the papers listed below, in addition to the lecture notes that will be posted in the course page in the Brightspace. Please notice that different sections of the same paper might be covered at different points of the course (the specific sections will be communicated in class). Additional readings will be announced in class and posted in the Brightspace.

Topics

1. Empirical Macro Models for Monetary Policy decisions
   • General Description, State Space Representation, Estimation, Computation of the Optimal Monetary Policy, Applications, Rudebusch and Svensson’s model.

   • Required Readings:

• Further Readings:


2. VAR Models

• Model representation and estimation, SVAR models and their identification, computing impulse-responses, forecasting.

• Required Readings:


• Further Readings:


3. Factor Models

• Static and Dynamic Factor models, Factor-Augmented VAR models.

• Required Readings:

• Further Readings:

4. Model Uncertainty
• Different forms of Model Uncertainty and the Model Space, alternative approached to Model Uncertainty.
• Required Readings:
• Further Readings:

5. Learning
• Alternative learning algorithms, models with a fixed policy rule, models with an optimizing Central Bank.
• Required Readings:
• Further Readings:

6. Additional Topics (time permitting): News shocks, Policy Uncertainty shocks
• The identification and impact of News Shocks, the impact of Policy Uncertainty shocks, uncertainty shocks and business cycles.
• Required Readings:
ADDITIONAL INFORMATION

Communication Policy

- Students are expected to consult the course page in the Brightspace regularly to keep up with any course announcements.
- Students are strongly encouraged to communicate to the Professor any concerns they may have with regard to the course as early as possible. Any feedback that would increase students’ satisfaction with the course is very welcome.

Beware of Academic Fraud!

Academic fraud is an act committed by a student to distort the marking of assignments, tests, examinations, and other forms of academic evaluation. Academic fraud is neither accepted nor tolerated by the University. Anyone found guilty of academic fraud is liable to severe academic sanctions.

Here are a few examples of academic fraud:
- engaging in any form of plagiarism or cheating;
- presenting falsified research data;
- handing in an assignment that was not authored, in whole or in part, by the student;
- submitting the same assignment in more than one course, without the written consent of the professors concerned.

In recent years, the development of the Internet has made it much easier to identify academic plagiarism. The tools available to your professors allow them to trace the exact origin of a text on the Web, using just a few words.

In cases where students are unsure whether they are at fault, it is their responsibility to consult the “Writing and Style Guide for University Papers and Assignments.” It can be found at: http://socialsciences.uottawa.ca/undergraduate/writing-style-guide

Persons who have committed or attempted to commit (or have been accomplices to) academic fraud will be penalized. Here are some examples of the academic sanctions, which can be imposed:
- a grade of “F” for the assignment or course in question;
- an additional program requirement of between 3 and 30 credits;
- suspension or expulsion from the Faculty.


and Academic Integrity Website (Office of the Vice-President Academic and Provost): http://web5.uottawa.ca/mcs-smc/academicintegrity/home.php

Resources for you

FACULTY MENTORING CENTRE - http://socialsciences.uottawa.ca/mentoring

The goal of the Mentoring Centre is to help students with their academic and social well-being during their time at the University of Ottawa. Regardless of where a student stands academically, or how far along they are in completing their degree, the Mentoring Centre is there to help students continue on their path to success.

A student may choose to visit the Mentoring Centre for very different reasons. Younger students may wish to talk to their older peers to gain insight into programs and services offered by the University, while older student may simply want to brush up on study and time management skills or learn about programs and services for students nearing the end of their degree.
In all, the Mentoring Centre offers a place for students to talk about concerns and problems that they might have in any facet of their lives. While students are able to voice their concerns and problems without fear of judgment, mentors can garner further insight in issues unique to students and find a more practical solution to better improve the services that the Faculty of Social Sciences offers, as well as the services offered by the University of Ottawa.

ACADEMIC WRITING HELP CENTRE - http://www.sass.uottawa.ca/writing/

At the AWHC you will learn how to identify, correct and ultimately avoid errors in your writing and become an autonomous writer. In working with our Writing Advisors, you will be able to acquire the abilities, strategies and writing tools that will enable you to:
- Master the written language of your choice
- Expand your critical thinking abilities
- Develop your argumentation skills
- Learn what the expectations are for academic writing

CAREER SERVICES - http://www.sass.uottawa.ca/careers/

Career Services offers various services and a career development program to enable you to recognize and enhance the employability skills you need in today's world of work.

COUNSELLING SERVICE - http://sass.uottawa.ca/en/counselling

There are many reasons to take advantage of the Counselling Service. We offer:
- Personal counselling
- Career counselling
- Study skills counselling

ACCESS SERVICE - http://sass.uottawa.ca/en/access

The University has always strived to meet the needs of individuals with learning disabilities or with other temporary or permanent functional disabilities (hearing/visual impairments, sustained health issues, mental health problems), and the campus community works collaboratively so that you can develop and maintain your autonomy, as well as reach your full potential throughout your studies. You can call on a wide range of services and resources, all provided with expertise, professionalism and confidentiality.

If barriers are preventing you from integrating into university life and you need adaptive measures to progress (physical setting, arrangements for exams, learning strategies, etc.), contact the Access Service right away:
- in person at the University Centre, Room 339
- online
- by phone at 613-562-5976

Deadlines for submitting requests for adaptive measures during exams
- midterms, tests, deferred exams: seven business days before the exam, test or other written evaluation (excluding the day of the exam itself)
- final exams:
  - November 15 for the fall session
  - March 15 for the winter session
  - Seven business days before the date of the exam for the spring/summer session (excluding the day of the exam itself).


The Student Resources Centres aim to fulfill all sorts of student needs.
The University of Ottawa does not tolerate any form of sexual violence. Sexual violence refers to any act of a sexual nature committed without consent, such as rape, sexual harassment or online harassment. The University, as well as student and employee associations, offers a full range of resources and services allowing members of our community to receive information and confidential assistance and providing for a procedure to report an incident or make a complaint. For more information, visit www.uOttawa.ca/sexual-violence-support-and-prevention