Course Syllabus
Advanced Macroeconomics: ECON8860
Fall 2018

Time and Place:
Tuesday and Thursday
9:00am - 10:15am
Maloney 313

Professor:
Ryan Chahrour
Email: ryan.chahrour@bc.edu
Course Homepage: chahrour.net
Office Hours:
   Wednesday, 1:30pm - 3:00pm
   Sign up at chahrour.net

Course Overview:
The first part of this course introduces some basic tools for solving and estimating linearized, full-information, dynamic-stochastic general equilibrium (DSGE) models. During this portion of the class, coursework consists of several problem sets with a computational emphasis. You will spend a great deal of time programming in MATLAB. After completing these problem sets, each student will have a “toolbox” of programs that she can use to address empirical macroeconomic questions in a structural manner.

The second part of this course explores alternatives to the linearized, full-information, rational expectations paradigm described above. We will focus on relaxing the assumption of full information, including static information games, models of news and noise, and models with dynamic signal extraction. Depending on interest and time, we may also consider some theories deviations from rational expectations.

Optional Text

Grading:
• 3 problem sets, presented in class for 30 minutes. (Presenter selected at random, with replacement.): 33%

• One replication, based on a paper that goes beyond full information: 33%

• Paper based on an extension of the replicated paper (due at end of finals.): 33%
Course Outline

Part 1: Computation and estimation of linearized DSGE models

Week 1: Solving linearized rational expectations models


Week 2: Structural vector autoregression (SVAR): estimation, identification


Week 3: SVAR: alternative identification approaches; factor-augmented VAR


Week 4: Generalized method of moments, impulse response matching


Week 5: Likelihood estimation and the Kalman filter
**Week 6:** Identification in DSGE models


**Part 2: Alternatives to FIRE**

**Week 7-8:** News and Noise


**Week 9:** Coordination Games


**Week 10-11:** Dynamic Models of Incomplete Information: Exogenous Information


**Week 12:** Dynamic Models of Incomplete Information: Applications


Zhen Huo and Naoki Takayama. Higher Order Beliefs, Confidence, and Business Cycles. 2015


**Week 13:** Sentiments


**Week 14:** Rational Inattention


**Week 15:** TBD