**New Keynesian Modeling**

**Aims**

The aim of this course is to introduce students to the core elements of what is arguably the most prevalent paradigm in macroeconomic modeling – the New Keynesian framework. This framework underpins much academic work on modeling the aggregate economy and the role of monetary policy therein and is the dominant organizing structure among modern central banks. By introducing nominal rigidities and imperfect competition in a micro-founded manner (based on optimization by the underlying households and firms) and pairing it with the discipline of Rational Expectations modeling, the New Keynesian paradigm can rationalize long held Keynesian notions of the source of business cycle fluctuations and justify policy actions in response to, or to mitigate, such fluctuations. While the course will mainly concentrate on the essential core of the New Keynesian framework, some extensions will also be discussed, along with topics of current relevance that are under active research.

**Texts**

The main text used will be, *Monetary Policy, Inflation and the Business Cycle* (PUP 2nd edition), by Jordi Galí, with emphasis on chapters 1-4. In addition, occasional references will be made to *Monetary Theory and Policy* (MIT), by Carl Walsh and *Interest and Prices: Foundations of a Theory of Monetary Policy* (PUP), by Michael Woodford.

**Lectures**

*Lecture 1: Background and motivation*

* Topics
  + History of thought in macroeconomic modeling that led to the NK paradigm
  + Classical monetary model in absence of distortions and nominal rigidities
  + Empirical evidence on sticky prices and the effects of monetary shocks
* Readings
  + Gali Ch. 1 (Introduction) and Ch.2 (A Classical Monetary Model)
  + Walsh Ch.1 (Empirical Evidence on Money and Output)
  + Bernanke Mihov (1998)
  + Leeper, Sims and Zha (1996)
  + Taylor (1999a)
  + Christiano, Eichenbaum and Evans (1999, 2005)
  + Bils and Klenow (2004)
  + Nakamura and Steinsson (2008)
  + Ramey (2016)

*Lecture 2: Classical Monetary Model*

* Topics
  + RBC framework and short (and long) run Classical dichotomy
  + Concepts of general equilibrium and model solution
  + Linearization, logs and exponentials
* Readings
  + Gali Ch. 2 (A Classical Monetary Model)
  + Jesus Fernandez-Villaverde ‘Macroeconomic Dynamics’ lectures 1-3

*Lecture 3: Basic New Keynesian model*

* Topics
  + Monopolistic competition and markups
  + Sticky prices (Calvo and Rotemberg)
  + Intertemporal optimization by households and firms
  + IS curve, Phillips curve
  + Model solution
  + The effects of shocks
* Readings
  + Gali Ch. 3 (The Basic New Keynesian Model)

*Lecture 4: Monetary Policy – Optimal and Simple Rules*

* Topics
  + Fluctuating distortions and the justification for policy intervention
  + Taylor principle and equilibrium determinacy
  + Optimal and simple interest rate rules
* Readings
  + Gali Ch. 4 (Monetary Policy in the Basic Model)
  + Taylor (1999b)
  + Levin, Wieland and Williams (1999)
  + Clarida, Gali and Gertler (1999)
  + Taylor and Williams (2011)
  + Lubik and Schorfheide (2003, 2004)