

## **Syllabus Macroeconomics –part II**

This module deals with developments in business cycle analysis. Two instructors (Albonico, Portoghesi) will contribute an overall teaching load of 24 hours

***Analysis of business cycle characteristics and Real Business Cycle (RBC) theory*** (6 hours). RBC models essentially are stochastic versions of the Ramsey Cass and Koopmans model, where uncertainty is determined by the occurrence of productivity shocks. Instructor: Alice Albonico

***Analysis of the basic New Keynesian model*** (3 hours). Prices are assumed to be sticky, in each period a fraction of firms cannot re-optimize its price and keep it fixed to the previous period. Intermediate good firms are monopolistically competitive. A role for monetary policy arises. Instructor: Alice Albonico

***Analysis of a medium scale DSGE model*** (3 hours). We will refer mainly to Christiano, Eichenbaum and Evans (2005) to introduce frictions in the New Keynesian model (price and wage indexation, wage stickiness, variable capacity utilization, habits in consumption, adjustment costs on investments). Impulse response functions analysis to different types of shocks. Instructor: Alice Albonico

***Tutorials*** (12 hours). Introduction to Dynare. Deterministic and stochastic simulation of DSGE models. Introduction of shocks. Instructor: Luca Portoghesi

**Essential references (additional material will be made available as the course unfolds).**

### ***RBC models***

King, R. G., and Rebelo, S. T. (1999). Resuscitating real business cycles. *Handbook of macroeconomics*, 1, 927-1007.

McCandless, G. (2008). The ABCs of RBCs. *Cambridge, Massachusetts, London*.

### ***New Keynesian model***

Gali J., 2008. *Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework (and Its Applications)*, Princeton University Press.

### ***Medium scale DSGE***

Christiano L., Eichenbaum M. and Evans C., 2005. *Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy*, Journal of Political Economy.

### ***Tutorials***

<https://www.dynare.org/manual/>