Macroeconomics III
EUI, Spring 2010

Instructor: Árpád Ábrahám, Office SP038, Tel.: 2909, E-mail: Arpad.Abraham@eui.eu.

Time and Location: Tuesday-Thursday 11.00-13.00; Room: TBA.

Office Hours: Tuesday 14.00-16.00 or on sign-up sheet.

Teaching Assistants: Charles Gottlieb and Mike Mariathasan.

Teaching Assistant Office Hours: TBA.

Recitation: Friday 9.00-11.00, Room: TBA.

Course Overview: The third course in Macroeconomics focuses on stochastic models. We will introduce the main workhorse model of modern macroeconomics: the stochastic growth model. Then, we study two of the most important frictions: uninsurable idiosyncratic shocks and search and matching frictions.

We first extend the dynamic programming techniques for stochastic models and study the stochastic version of the neoclassical growth model. We also learn some simple solution techniques which make these models tractable using the computer. This methodology will enable us to study the sources and implications of business cycles.

Then we turn our attention to another source of uncertainty: idiosyncratic shocks. In particular, we study the heterogenous agent version of the stochastic growth model where agents face stochastic and idiosyncratic (income) shocks. We will see that when these shocks are uninsurable then the allocation will be different from the representative agent model. Hence, these models will provide us with tools to study several important questions like the interaction between income, consumption and wealth distribution and distributional effects of different economic policies.

We conclude the course with another friction: search and matching. These frictions give rise to equilibrium unemployment in labor search models and they provide a need for money and (potentially) for monetary policy in consumption search models.

Readings: I will provide lecture notes extensively. The main background material is in the following textbooks:

- L. Ljungqvist and T. J. Sargent: Recursive Macroeconomic Theory, The MIT Press, 2nd edition, 2004.
- T. F. Cooley (ed.): Frontiers of Business Cycle Research, Princeton University Press, 1995.
- N. Stokey and R. E. Lucas: Recursive Methods in Economic Dynamics, Harvard University Press, 1989.

Grading: There will be 5 assignments throughout the term and a final exam. They will count toward the final grade as follows.

Assignments	10%
Final	90%

The assignments will consist of some modelling, analytical and numerical tasks. Some very basic knowledge of programming (like those required/taught at Macro I) will be required. Simple Matlab codes will be provided and discussed during class and/or recitations.