Macroeconomics III
EUI, Spring 2011

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

Time and Location: Monday-Wednesday 15.00-17.00; Room: VSP1.

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

Teaching Assistants: Immo Schott and Jan Witajewski.

Teaching Assistant Office Hours: TBA.

Recitation: Friday 8.45-10.45, Room: VSP1.

Exam: April 15, Friday, 10.00-13.00, Room: VSP1.

Course Overview: The third course in Macroeconomics focuses on stochastic models. We will buil upon the main workhorse of modern macroeconomics: the optimal (equilibrium, neoclassical) growth model.

We first use dynamic programming techniques to study the stochastic growth model and 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. We also show how we can decentralize the efficient allocation (the solution of the social planner's problem) as a competitive equilibrium. We will also study an extension where the competitive equilibrium is not efficient.

Then we turn our attention to another source of uncertainty: idiosyncratic shocks. We start this by study how consumption responds to individual income shocks under different market structures and under different assumptions on the shock process. Then we enrich the environment of the neoclassical growth model by introducing ex post heterogenous agents facing 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 the income, consumption and wealth dispersions and thr distributional effects of different economic policies.

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.

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 and II) will be assumed. Simple Matlab codes will be provided and discussed during class and/or recitations.