

Macroeconomics I (Part II)

Master in Economics

Course 2012-2013

Wednesday and Friday, 16:00 – 18:00, room 104

Universitat de Barcelona
Facultat d'Economia i Empresa
Departament de Teoria Econòmica

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Office hours: Friday, from 15:00 to 16:00.

This course aims at introducing students to modern macroeconomic theory. This part of the course consists of 10 sessions, 2 hours each, in which we will focus on the analysis of the Neoclassical Growth Model.

There will be two problem sets and a final examination. The final grade of this part of the course will be the maximum between a mixed grade (where problem sets account for 40% and the final exam for 60%) and the grade of the final exam.

Basic bibliography:

- Acemoglu, D. (2008), Introduction to Modern Economic Growth, Princeton University Press (Ch 5,7,8).
- Barro, R.J., and X. Sala-i-Martin (2004), Economic Growth, 2nd ed (Ch 2, 3, 5).

Optional readings:

- Romer, D. (2001), Advanced Macroeconomics, 3rd ed., chapter 2, part A.
- Cass, D. (1965), "Optimum growth in an aggregative model of capital accumulation," Review of Economic Studies, 32, 233-240.
- Koopmans, T. (1965), "On the concept of optimal economic growth." In The Econometric Approach to Development Planning, Amsterdam: North Holland.
- Lucas, R.E. (1988), "On the mechanics of economic development," Journal of Monetary Economics, 22, 3-42.
- Ramsey, F. (1928), "A mathematical theory of saving," Economic Journal, 28, 543-559.

Topics of the course:

1. Foundations of Neoclassical Growth
2. Mathematical review
 - a. An Introduction to the Theory of Optimal Control
 - b. Review of differential equations
3. The Neoclassical Growth Model
 - a. Setup of the Model
 - b. Equilibrium
4. Analysis of the Neoclassical Growth Model
 - a. The Steady State
 - b. Transitional Dynamics
 - c. Behavior of the Saving Rate
 - d. Speed of Convergence
5. Extensions to the Neoclassical Growth Model
 - a. Productivity and population growth
 - b. Finite Horizons
 - c. Government Policy
 - d. Labor decisions
 - e. One-Sector Model with Physical and Human Capital