EC750.01 MACROECONOMIC THEORY

Fall 2010

Fabio Schiantarelli
New Administration Building, Room 490
Tel: 617-5524512 (office)
E_Mail: schianta@bc.edu
Office Hours: Tuesday and Thursday 10.30-11.30 or by appointment

Course content and objective

The first semester Macroeconomic Theory course provides an overview of growth theory. We cover the standard, mostly non stochastic, models of exogenous and endogenous growth. Among others, we will study the Solow-Swan model, the Ramsey growth model with infinitely lived optimizing agents, overlapping generation models without and with altruism, Ricardian equivalence, models with human capital, basic AK models of endogenous growth, product variety models and quality ladder Schumpeterian growth models. We will also review some crucial empirical papers on applied growth. In the last quarter of the course we will study the choice of investment, both in a deterministic and stochastic setting. This will serve as an introduction and link to EC751.

Grading, exams, and tutorials

The evaluation of the students will be based on a Mid-Term Exam (35% of total grade) and a Final Exam (65%).

Midterm Examination: Tuesday, October 22, in class
Final Examination: To be announced by the DGS

Students are also strongly encouraged to solve the weekly exercises that will be assigned. Collaboration is fine, provided each student makes a strong individual effort. The exercises will be corrected in a weekly tutorial session lead by a Teaching Assistant. In borderline cases, a record of sustained good performance on problem sets will result in a higher grade.

Reading material

The two main sources of information for the course are:


Another useful supplementary book that does not require dynamic optimization, and may be helpful as a transition book is


It contains, among other things, very useful exercises. Portions of the following book will also be referred to in the course outline:


I will also direct you to the original papers. Core readings (marked with a *) and further readings are listed under each heading of the course outline. Everyone should carefully read and think about the core readings. The further readings include classic articles, more advanced or detailed treatments of the topics, and background material. Students with a strong interest in macroeconomics in general or in a particular topic should be familiar with these readings.

**Course outline**

1) **Trends and Cross Country Differences in Income: An Introduction.**

   BSM, Chapter 12

   DA, Chapter 1


2) **The Solow Growth Model.**

   BSM, Chapter 1.

   DA, Chapter 2

   DR, Chapter 1.1-1.7.

3) The Solow Model, Extensions and Testing.

DA, Chapter 3


4) More on Cross Country Income Differences

DA, Chapter 4


See also the response by Acemoglu-Johnson-Robinson and Albouy’s note to readers.


5) **The Ramsey Model with Infinitely Lived Agents.**

BSM, Chapter 2

DA, Chapter 5 (skim) and 8

DR, Chapter 2.1-2.7.

6) **The Overlapping Generations Model.**

BSM, Chapter 3, 3.8

DA, Chapter 9

DR, Chapter 2.8-2.12.

Romer, *Advanced Macroeconomics*, Chapter 2, Part B.


7) **Fiscal Policy, Ricardian Equivalence**

DR, Chapter 11.


8) **First Generation Endogenous Growth Models**

a) **One Sector Models of Endogenous Growth**

BSM, Chapter 4, 4.1-4.4 and 4.6

DA, Chapter 11

b) **Two Sectors Models of Growth**

BSM, Chapter 5, 5.1-5.4  
DR, Chapter 3, Part A  

*Journal of Monetary Economics* 22:3-42.

9) **Endogeneizing Technological Change**

a) **Technological Change: Models with Expanding Variety of Products**

BSM, Chapter 6, 6.1-6.4  
DA, Chapter 13  


b) **Technological Change: Models with Improvements in the Quality of Products**

BSM, Chapter 7, 7.1-7.2 and 7.5  
DA, Chapter 14  


c) **Models of Technology Diffusion**

BSM, Chapter 8, 8.1-8.5 and 8.8  
DA, Chapter 18
10)  Empirical Analysis of Differences in Growth Rates


11)  Investment

a)  Investment with adjustment costs: Review of deterministic case:

    BSM, Chapter 3.2,

    DR, Chapter 8.

b)  Stochastic case: my notes.