Macroeconomic Theory I
Economic Growth
(and Introduction to Dynamic General Equilibrium Economies)

The first half of the semester is an introduction to the techniques and the applications of dynamic general equilibrium models, with particular emphasis on models of economic growth.

There are seven sections. The basic readings for each section are indicated by stars. The non-star items are selected articles which you may want to refer to if you get excited with the particular topic; they are not required for the course.

The lectures will alternate two modes. When we introduce a benchmark paradigm, such as in the case of the Neoclassical Growth Model, the presentation of the model and the derivation of the results will be quite detailed, with emphasis on both the techniques and the economics. The presentation will instead be more “chatty” and brief when we consider applications or extensions, such as those in Sections 4 and 7.

If you are an MIT Econ PhD student, you have to take the course (or pass the waiver on Friday 2/7). Otherwise, please come and see me to discuss whether this course is appropriate for you.

1. A Prelude to Growth Facts and Growth Models (1-2 lectures)


2. The Neoclassical Growth Model (2-3 lectures)


4. Endogenous Growth I: AK, Spillovers, Human Capital (1-2 lectures)

* Barro, R.J., and X. Sala-i-Martin (1995), *Economic Growth*, chapters 4 and 5


5. Endogenous Growth II: R&D, Innovation, Technological Change (1-2 lectures)

* Barro, R.J., and X. Sala-i-Martin (1995), *Economic Growth*, chapters 6 and 7


