14.461: Part I: Technology and the Macroeconomy

Daron Acemoglu

September 2, 2014

This course will cover selected topics in theoretical and empirical analysis of technology and technological change.

There will be three problem sets, which will count towards 30% of your final grade. The remaining 70% will be from a project due in November (exact time to be determined). This project will either be a proposal for a research article, or application of an empirical paper from a prearranged list, or a detailed critique and extension of an existing theoretical article. More details on the available choices for the project will be provided later.

Please note that two of the lectures will be on Friday during the recitation time.

Course details:
My e-mail: daron@MIT.edu.
Lectures: TuTh 1-2:30, E51-361
Recitation: F 2:30-4, E51-361
Teaching Assistant: Ernest Liu (liuer@mit.edu)

Topics

Review of Basic Models of Endogenous Technological Progress (one lecture, EL, September 4)

Main reading:

Other references:


Knowledge Spillovers and Diffusion (one lecture, DA September 9)

Main reading:


Other references:


**Competition, Policy and Technological Change (one lecture, DA, September 11)**

Main reading:


Other references:


**Technology, Tasks and the Labor Market (one lecture, DA, September 18)**

Main reading:


Other references:
Directed Technological Change and Implications (two lectures, DA, September 23 and 25)

Main reading:


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1September 16 will be a recitation.


Other references:


**Innovation and Reallocation (one lecture, DA, September 26)**

Main reading:
Acemoglu, Daron, Ufuk Akcigit, Nicholas Bloom and William Kerr (2013) “Innovation, Reallocation and Growth” NBER working paper.


Other references:


Acemoglu, Daron and Dan Cao (2010) “Innovation by Entrants and Incumbents” mimeo.


Climate Change and Technology (two lectures, DA, September 30 and October 2)

Main reading:


Other references:


Innovation, Creativity and Technological Progress (one lecture, October 7)

Main reading:


Other references:


Misallocation and Productivity Differences Across Countries (one lecture, DA, October 9)

Main reading:

Other references:

Network Linkages: Technology, Productivity and Volatility (three lectures, October 10, 14 and 16)

Main reading:
Acemoglu, Daron, Asuman Ozdaglar and Alienza Tahbaz-Salehi (2014) “Microeconomic Shocks and Macroeconomic Tail Risks” mimeo.


Other references:


