14.461: Part I: Technological Change

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This course will cover selected topics in theoretical and empirical analysis of technological change. The course will draw both on Acemoglu, *Introduction to Modern Economic Growth*, Princeton University Press, 2008, and research articles.

There will be three problem sets, which will count towards 30% of your final grade for this part of the course. The remaining 70% will be from a one half hour final examination at the end of the course (time to be determined).

Topics

Review of Basic Models of Endogenous Technological Progress (two lectures)

Main reading:


Other references:


**Knowledge Spillovers and Diffusion (one lecture)**

Main reading:

Other references:

**Competition and Technological Change (one lecture)**

Main reading:

Other references:

**Directed Technological Change and Implications (two lectures)**

Main reading:


Other references:


**Technology and the Labor Market (one lecture)**

Main reading:


Other references:


**Productivity Differences Across Countries (one lecture)**

Main reading:


Other references:


Misallocation, Productivity Differences and Growth (one lecture)
Main reading:

Other references:

Innovation and Reallocation (one lecture)
Main reading:
Innovation, Growth and Firm Size Dynamics (two lectures)

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

Other references:

Sectoral Linkages: Implications for Growth and Volatility (two lectures)

Main reading:

Other references:


