14.009: "Economics and Society's Toughest Problems"

**Course description**: Should we trade more with China? Why are some countries poor, and some countries rich? Why are the 1% getting richer? Should the U.S. have universal health insurance? How can you fix failing schools? What should we do to prevent the next Great Recession? Economics shows you how to think about some of the toughest problems facing society -- and how to use data to get some answers. This exploratory course will feature a series of lectures by MIT's economics faculty, showing how their cutting-edge research can help you answer these questions and more.

**Course instructor / coordinator**: Prof. Benjamin Olken

**Detailed description**:

This course aims to introduce students to the wide variety of challenges economists confront, the types of theoretical frameworks economists use to think about them, and how economists use data, natural experiments, and real experiments to get answers. No pre-requisites are required.

The course will have one lecture per week, on Tuesday afternoons (4:00-5:00pm), throughout the fall semester. After an introduction to the field, the core of the course will be a series of lectures by MIT economists that highlight how their research has helped us understand one of society’s toughest challenges.

**Course requirements**:

There will be short reading to prepare for each class, and students will need to answer a few short questions in advance on each reading. We will also have a few short questions to be answered during class.

**Grading**:

Grading is pass/fail and will be based on responses to the readings and in-class participation.
Course Schedule: (13 lectures)

- **Introduction (Sep 10).**

- **Health care (Sep 17).**
  - Amy Finkelstein. Should we have universal health insurance in the United States? Or should we take the money and give people cash instead? Amy Finkelstein will discuss how to use the large-scale Oregon Health Insurance Experiment, as well as changes in Obamacare in Massachusetts and elsewhere, to understand what giving people insurance really does – and how much people value it.

- **Trade - Gains and Costs. (Sep 24 and Oct 1).**
  - Arnaud Costinot. Why do countries trade with one another, and when is this likely to be a good thing? One of the oldest questions in economics keeps coming to the forefront of today’s policy debates. Arnaud Costinot explains how economists understand the gains and costs of trade.
  - David Autor. What are the downsides of trade for workers in affected industries? David Autor will explain how he’s uncovered the effects of “The China Shock” on US workers, cities, and politics.

- **When should the government stop firms from being too big? (Oct 8).**
  - Nancy Rose. The US government has broken up some of the biggest monopolies in the country – from Standard Oil to the AT&T telephone monopoly. In the 1990s the Federal government launched an antitrust suit against Microsoft, and today there are calls for the government to break up the tech giants and to prevent mergers like TMobile and Spring. Nancy Rose will discuss how economists – in academia and government – decide when a firm has too much market power and it’s time to take action, and when it is better to let firms evolve on their own.

- **The Developing World (Oct 22 and Oct 29).**
  - Daron Acemoglu. Political institutions and the wealth of nations. Why are some countries rich and some countries poor, and how has this changed over the past 500 years? Daron Acemoglu will discuss the role of political institutions in shaping the long-run development of nations.
  - Ben Olken. Corruption. Corruption is one of the toughest challenges in developing countries, but it is particularly hard to study since it is hidden. Ben Olken will discuss his work using new approaches to study corruption in the field – from digging up roads to observing deforestation from space – and how the basic economic theory can help policy makers on the ground fight corruption.

- **Economics and Business Challenges. Nov 5.**
  - Gary Loveman, MIT Economics PhD and former CEO of Caesars Entertainment, will discuss how data analytics and economics can transform management and business enterprises, in both the gaming and health care sectors.

- **The Great Recession (Nov 12).**
  - Alp Simsek. The Great Recession was the largest economic downturn in the United States since the Great Depression. Alp Simsek will talk about what economist have figured out about what caused the Great Recession — and what can be done to make sure it doesn’t happen again.
• Schools (Nov 19):
  o Parag Pathak. Who should go to school where? Parag Pathak on how economists
designed the algorithms used to assign millions of public school students to schools in
New York, Boston, and throughout the country.
• Using Data to Learn about the World: (Nov 26 – Dec 3)
  o Josh Angrist. Josh Angrist will talk about how we can use data and careful research
designs to uncover cause and effect: “the miracle of econometrics”.
  o Esther Duflo Networks, machine learning, and A/B testing in the wild (Dec 3).
    Economists at MIT have pioneered the use of randomized controlled trials to understand
    how to solve the toughest development challenges. Through the lenss of an example –
    how to increase immunization rates in rural India – Esther Duflo will explain one
    example of how both big data tools and randomized controlled trials can shed light on
    how to solve important social policy problems.
• Panel Discussion on life in Economics (Dec 10):
  o We will conclude with two panels: a short panel on the economics major(s) featuring
    juniors and seniors, and another panel on actually going economics research as a graduate
    student.