# Economics 2010b Syllabus, Spring 2018

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Office: Littauer 119

Office Hours: Tuesdays, 1-2pm and by appointment

TF: Angie Acquatella (acquatella@g.harvard.edu)

Office Hours: Thursdays, 11:30am-1pm and by appointment

# Textbooks

\* Mas-Colell, Andreu, Michael Whinston, and Jerry Green. 1995. Microeconomic Theory. New York: Oxford University Press.

\* Hart, Oliver. 1995. Firms, Contracts, and Financial Structure. London: Oxford University Press.

Bolton, Patrick and Mathias Dewatripont. 2005. <u>Contract Theory</u>. Cambridge, MA: MIT Press.

Tirole, Jean. 2006. <u>The Theory of Corporate Finance</u>. Princeton, NJ: Princeton University Press.

# Course Description

We will study two main topics. The first six lectures will be devoted to general equilibrium theory, including optimality, existence of equilibrium, equilibrium under uncertainty, and foundations. The remaining lectures will be devoted to contract theory, including moral hazard, theory of the firm, and financial contracting.

## Problem Sets and Midterm

There will be five required problem sets, which will be due on February 2<sup>nd</sup>, February 9<sup>th</sup>, February 16<sup>th</sup>, February 23<sup>rd</sup>, and March 2<sup>nd</sup>. The problem sets are worth 20% of the grade for this part of the class. The midterm will be worth the remaining 80% of the grade and will be given in class on March 8<sup>th</sup>. The problem sets can be submitted in the TF's mailbox or online at the course site.

# Timing

The class will meet on Tuesdays and Thursdays from 10:00am to 11:29am. Location: Harvard Hall, room 202.

# Course Outline and Schedule

#### Week 1

Topics: intro to general equilibrium theory; welfare theorems; Pareto-optimal allocations.

**Readings**: lecture notes and MWG Chapters 16.A-16.F

#### Week 2

Topics: existence of Walrasian equilibrium; equilibrium uniqueness; testability

**Readings**: lecture notes and MWG Chapters 17.A-17.F

\*Problem Set 1 due Friday, February 2<sup>nd</sup>

#### Week 3

**Topics**: firms and production; equilibrium under uncertainty; foundations Readings: lecture notes and MWG Chapters 18.A-18.C, 18.E, 19.A-19.G \*Problem Set 2 due Friday, February 9<sup>th</sup>

### Week 4

Topics: intro to moral hazard; risk—incentives trade-off; informativeness principle **Readings**: lecture notes and MWG 14.B, Bolton and Dewatriport Chapter 4 \*Problem Set 3 due Friday, February 16<sup>th</sup>

## Week 5

**Topics**: multi-task problem; limited liability; moral hazard in teams **Readings:** lecture notes and Bolton and Dewatriport Chapters 6.2, 8.1

\*Problem Set 4 due Friday, February 23rd

## Week 6

**Topics**: introduction to the theory of the firm; property rights theory

**Readings**: lecture notes and Hart, chapters 1 and 2

\*Problem Set 5 due Friday, March 2<sup>nd</sup>

## Week 7

**Topics**: financial contracting

**Readings**: lecture notes and Tirole, chapter 3 \*In-class midterm on Thursday, March 8<sup>th</sup>