Economics 211A and 271A: Contract Theory

M, 9:00-11:30, BH 9294, Autumn 2016

http://www.econ.ucla.edu/sboard/teaching.html

Professor: Simon Board.
Office Hours: By appointment.
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This course studies trading relationships between small numbers of agents. It will cover many of the tools and techniques used in models of moral hazard, adverse selection and incomplete contracting. We start with static models of moral hazard and mechanism design, and develop their dynamic counterparts. We then consider environments where agents cannot use formal contracts, studying relational contracts and trading relationships with no contracts. While the aim is the develop a toolset, we motivate the analysis with a wide variety of applications drawn from Industrial Organization, Corporate Finance, Personnel Economics, and Public Economics. The class builds on 201B and 201C. I also recommend “211C: Game Theory and Economic Applications”

For those enrolled, grades are as follows:

- Three problems sets (15% each). You can discuss the substance of the problems, but the final version should be your own. The problem sets will be due on Weds 21st October, Mon 9th November and Wed 2nd December (these dates may change).
- Write your own model (10%). Find a newspaper article that discusses a contracting problem, write a model to capture the economics and discuss what theorems you would like to prove. Maximum 4 pages plus the original article. Due date: last day of class.
- Final (45%). Date to be determined.

Books and Manuscripts

*Bolton and Dewatripont (2005), Contract Theory, MIT Press.
Laffont and Martimort (2002), *The Theory of Incentives*, PUP.


1. Moral Hazard: One Agent

Bolton and Dewatripont, *Chapters 4 and 6.2.*


2. Moral Hazard: Many Agents

Bolton and Dewatripont, *Chapter 8.*


3. Moral Hazard: Dynamics

Bolton and Dewatripont, *Chapter 10*.


4. Reputation


5. Relational Contracts


### 6. Mechanism Design: One Agent

Bolton and Dewatripont, *Chapter 2*.

Laffont and Martimort, *Chapters 2 and 3*.


### 7. Mechanism Design: Many Agents

Mas-Collel, Whinston and Green, *Chapter 23*.

Bolton and Dewatripont, *Chapter 7*.


Milgrom (2004), *Putting Auction Theory to Work*, CUP.


8. Mechanism Design: Without Transfers


9. Mechanism Design: Dynamics with Commitment

Bolton and Dewatripont, Chapter 9.

Laffont and Martimort, Chapter 8.


### 10. Mechanism Design: Dynamics without Commitment


### 11. Mechanism Design: Competition


12. Incomplete Contracts

Bolton and Dewatripont, *Chapter 11 and 12.*


13. Contracting with Externalities

Bolton and Dewatripont, *Chapter 13.3.*


14. Signalling: Dynamics


15. Mechanism Design: Multidimensional Types

Bolton and Dewatripont, *Chapter 6.1*.
