

Contract Theory (Spring 2017)
Behrang Kamali

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Description

This is an advanced course on contract theory, broadly defined.

Course Material

The main textbook for this course is:

[[Bolton and Dewatripont, 2005](#)]

However, most of the course will be taught using articles rather than the textbook.

Slides, exams, solutions and other material is *not* for distribution to those outside of the current class.

Grading

The final grade will depend on

- 2 problem sets (%10),
- 4 short essays (%30),
- midterm exam on 1396/02/12 (%25),
- final exam (%35).

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Course Outline

1. Review of Game Theory & Bayesian Games

2. Moral Hazard

(a) Static Models

i. Single Agent

- [Bolton and Dewatripont, 2005, Chapter 4, 6.2]
- [Mirrlees, 1999]
- (*) [Hölmstrom, 1979]
- [Rogerson, 1985a]
- (*) [Holmstrom and Milgrom, 1991]
- [Innes, 1990]
- (*) [Grossman and Hart, 1983]

ii. Multiple Agents

- [Bolton and Dewatripont, 2005, Chapter 8]
- (*) [Lazear and Rosen, 1981]
- [Green and Stokey, 1983]
- (*) [Holmstrom, 1982]
- [Legros and Matthews, 1993]

(b) Dynamic Models

- [Bolton and Dewatripont, 2005, Chapter 10]
- (*) [Rogerson, 1985b]
- [Fudenberg et al., 1990]
- (*) [Fudenberg and Tirole, 1990]
- [Hermalin and Katz, 1991]
- (*) [Holmstrom and Milgrom, 1987]

3. Adverse Selection

(a) Monotone Comparative Statics

- [Topkis, 1998]
- [Milgrom and Shannon, 1994]
- [Milgrom and Roberts, 1990]

(b) Second-degree price discrimination

- i. Revelation and Taxation Principles
- ii. Two Types
- iii. Finitely Many Types
- iv. Continuum of Types
 - [Mussa and Rosen, 1978]
 - (*) [Maskin and Riley, 1984]

Short Essays:

Summarize each of the following in 500 words and provide a real world application related to each in 100 words.

1. “John C. Harsanyi - Prize Lecture: Games with Incomplete Information”. Nobelprize.org.
2. [Klemperer, 2000] (1396/02/19)

Summarize each of the following in 250 words and provide a real world application related to each in 100 words.

1. [Holmstrom and Milgrom, 1987] (1396/02/31)
2. [Akerloff, 1970] (1396/03/07)

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