Read this syllabus carefully. It is an informal contract between teacher and student, and lays out the plan for the entire term. If there are changes, I will post revised versions on the web and let you know they are there.

Overview

This is a course about social science-based approaches to the design of organizations in developed economies (mostly business firms). We 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 in which 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 Labor Economics, Industrial Organization, Personnel Economics, Public Economics, and Corporate Finance. The economic approach generally assumes that workers know what they want, have some foresight about their future preferences, and are patient in striving toward future goals.

Prerequisites

You are expected to have taken or be familiar with game theory (e.g., PS/Ec 172) and convex optimization (e.g., Ec 181). Familiarity with real analysis and (ordinary) differential equations is also useful but not absolutely necessary.

Grades

Grades will be determined by three problem sets (15% each), class participation (5%), and a final exam (50%). To make your grades comparable with students at the peer schools you compete with
for jobs and admission to graduate programs, I will use a fairly inflated curve with approximately 40% A’s and B’s, and 20% C’s.

**Problem Sets**

There will be three problem sets. The questions will build upon the concepts and techniques taught in class, and they will be graded on a 0 − 100 scale. Problem sets may be submitted in groups of up to 3 students. They are due at the beginning of class on the following dates:

- Problem Set #1: Tuesday, April 15 (Week 3)
- Problem Set #2: Tuesday, May 6 (Week 6)
- Problem Set #3: Tuesday, May 20 (Week 8)

Late homework will be reduced in grade by 50% for each day late and not accepted after two days. The only standard exception is a medical excuse approved by me at least 24 hours in advance (and certified in writing by a health care professional). You can try to email me for other extensions but I am generally very unsympathetic to granting an extension for a reason that was foreseeable in advance. (For example, if you are on a recruiting or science trip that you knew about at the beginning of the term, I won’t grant an extension.)

**Final Exam**

The final will be similar to the problem sets (albeit shorter), and it will cover everything discussed in class, in the readings and the course textbook.

**Class Participation**

Attending class is strongly recommended. I will be following the textbook loosely, so it will be helpful for you to take notes. To incentivize you to come to class and engage in the classroom discussion, (a small) part of your grade will depend on your class participation.

**Readings (subject to change)**

*Note:* The list is long. Don’t be intimidated. It is intended to be on the comprehensive side, and many of the papers below are summarized in the textbook. Reading the textbook chapters and taking notes in class should be sufficient to be successful in this course.

- Segal and Tadelis (2002), Lectures on Contract Theory, Stanford University (online link).
- Stole (1993), Lectures on Contracts and Organizations, University of Chicago (online link).
Moral Hazard (∼ 2 weeks)

- Bolton and Dewatripont, Chapters 4 and 6.2.

Moral Hazard with Many Agents (∼ 1 week)

- Bolton and Dewatripont, Chapter 8.

Dynamic Moral Hazard (∼ 2 weeks)

- Bolton and Dewatripont, Chapter 10.

Relational Contracts (∼ 1 – 2 weeks)

- Bolton and Dewatripont, Chapter 11.

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**Adverse Selection** (~ 1 – 2 weeks)

· Bolton and Dewatripont, Chapters 2 and 7.

· Baron and Myerson (1982), “Regulating a Monopolist with Unknown Costs”, *Econometrica*.


**Dynamic Adverse Selection** (~ 1 – 2 weeks)

· Bolton and Dewatripont, Chapter 9.


**Reputation** (if time permits)

