

California Institute of Technology
Organizational Design
BEM/Econ 146 WINTER 2011

Version 1/2/2011

Class hours **MW 2-330 Baxter 228**

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Office Hours TTH 1-230 and by appointment.

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TA office hours TBA

Text: Lecture notes, some readings.

Note: I am using book material I am writing that is evolving (Organizational Economics), and some readings. The book chapters are indicated below and will be available a week or two previously on the web.

These are constantly in revision. Your comments and frank feedback will also help and if you have something especially useful to contribute I'll remember to thank you in the introduction to the book.

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 large changes I'll post revised versions on the web and let you know.

This is a course about social science-based approaches to the design of organizations in developed economies (mostly business firms). Most of the course draws on 'labor economics', the branch of economics concerned with how workers are matched with firms, trained, paid, promoted, and are fired or choose to quit. The economic approach generally assumes workers know what they want, have some foresight about their future preferences, and are patient in striving toward future goals.

The course is loosely divided into three parts. The first section (weeks 1-3) introduces the basic ideas and presents models of how workers are motivated and the concept of organizational architecture. This section begins by reviewing basic ideas in managerial economics and game theory. In this section we ask questions like: Why do people work? How should they be paid in order to motivate them to be most productive? Why are motivations and pay schemes different in different sorts of firms and industries?

The second section II (weeks 4-6) adds detail. We will study "decision rights" (which workers get to make which decisions), how firms search for the best workers while workers 'advertise' themselves to firms (e.g., by getting educated), and implications of these processes for

organizational practice. In this second section we ask questions like, Why go to school? How do workers get paid back for their investments in education (e.g., in higher wages, or other ways?) How do firms keep the best workers and decide which ones to promote? Is there discrimination in the labor market? (If so, why, and what can we do about it.) We also discuss how compensation is set and how workers are evaluated.

The third section (III) deals with miscellaneous topics. First we discuss ethics and corporate culture. In these two sections we ask questions like, What is a 'corporate culture'? Can cultural rules help effect coordination? How much can cultures be changed or shaped? We will also talk about business ethics-- what are a manager's ethical responsibilities? Does being ethical pay?

Next we talk briefly about innovation, and about governance and restructuring (i.e., reconfiguring firms through merger, privatization or LBO and other organizational forms). The historical experience of LBOs puts into sharp relief some basic questions about productivity and what a firm owes its workers, and how dramatic changes can improve productivity, especially when massive amounts of capital need to be reallocated from "smokestack" industries to brand new ones (e.g., Internet portals). This section also discusses regulation and "capture" of regulatory processes by lobbying and influence activities by firms. Finally, we will talk a bit about overall corporate strategies of companies and the challenges that face startup companies.

The course is eclectic in its approach, use of teaching materials, and topic coverage. About half of the course is material that would normally be covered in labor economics. Most of the ideas are expressed in simple analytical models, and empirical studies of these ideas are conducted with field data drawn from surveys of workers and firms (and sometimes, experiments). The weeks on restructuring and corporate strategy use materials that are typical of MBA program courses, including some nontechnical articles. My own research also introduces psychological regularities into economics, so we will have "behavioral economics moments" when appropriate, especially in discussing reciprocity and culture.

Because the course is cumulative and builds on the early weeks, **adding the course will not be allowed after the third week of class.**

Grades

Grades will be determined by two problem set homeworks (20% each), one of two "submit questions" (5%, you choose one) a final examination (35%), and "class contribution" (20%). 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 quasi-curve with approximately 40% A's and B's, and 20% C's. "Quasi-curve" means it will be adjusted upward or downward based on my sense of how the class has performed as a whole relative to previous classes and my expectations and standards.

Homework

The homework questions generally ask you to think about ideas or give examples; a few require some algebra to think through models, though most of the ideas in this course are not well developed theoretically so it is impossible to give very mathematical problem sets that are on point. Homework must be typed, although mathematical symbols can be handwritten if that saves you time and if they are legible to the TA. Unless otherwise note, **Write no more than one typed page per question (single or 1.5 line spacing, 12-point font). Think carefully**

before you write. Many questions only require a paragraph—essentially a one-phrase answer with some elaboration. Any material beyond the first page will be ignored. (The idea is to teach you to make your arguments pithily and clearly, not just to core dump everything that might seem germane.) 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.)

The final will be similar to the homework, although it will cover everything discussed in class, in readings and books, and including some short hand outs, like newspaper articles, which will be handed out spontaneously and listed on the syllabus retrospectively (Melissa Slemin will have hardcopies of all such readings).

Contribution

Note: Contribution grading will not begin until the 2nd week of class. Among other things, this course is designed to give you a taste of how MBA education works (since some of you will probably get MBA degrees later, and will work in management positions with others who have MBAs). It is also designed to force you to be more comfortable in a group setting speaking up, asking questions, and responding to me and other students. This sort of skill is crucial in group meetings which are where most business decisions are made. I realize it is not a typical Caltech classroom requirement but it is crucial in business.

An important part of education in MBA classes-- and something I think you should learn as well-- is the ability to communicate in large groups with others verbally, on the fly, about how abstract ideas related to solving concrete problems. A good way to develop this ability is for you to both provoke and participate in classroom discussions. So I'll "force" you to do so.¹ At the end of each class I (and possibly outside observers like TAs) will award 0, 1, or 2 points for your contribution to that class. This also means we will use a seating chart and you should sit in your assigned seat every day. (Most people sit in the same seats anyway, and it helps me learn your names which, in turn, helps me judge your contribution better.) The seating chart will "freeze" on the third day of class

You can contribute spontaneously, or you might be called on by me. To make it less intimidating to be called on abruptly (i.e., "cold calling"), I'll use a method called "warm calling": Before each class I will write a few names on the board; these people will be called on first, in the order the names are written.

What constitutes good contribution? Raising an interesting point which is either germane to the debate, or steers it in a different direction. Knowing a pertinent fact (e.g., American CEO's are paid roughly 500 times average worker salary; whereas European and Japanese CEOs are only paid 20 times as much), or asking a question about a pertinent fact (how many CEOs are also Chairman of their company boards?). Disagreeing politely with a factual claim or opinion

¹ A former student complained that I "forced" people to come to class. Absolutely not. Come to class if you find it worthwhile. I *do* incentivize *contributing* because it gives you a taste of MBA life and speaking cogently in a large group is something most people find intimidating which you need to learn, at least a bit. If you feel you're being forced to come to class, or don't like having a small part of your grade tied to contribution, then don't take this class.

another student has. Or reminding the class of something relevant in the reading. Because the goal is to force you to contribute in class, on the fly, I won't award any credit for emails or observations you make after class, even though they are sometimes useful and help future classes.

To get your overall contribution score, I'll add the point values from the entire term (excluding the first day). I will also give you your total scores after the third and sixth weeks so you can gauge how you're doing and whether you feel you should contribute more or not.

Of course, some people are more shy or less verbally fluent than others; grading class contribution might seem to "penalize" those people. But warm calling gives you a chance to mentally prepare. And you can prepare in other ways, by making a short list of facts or questions as you read (even writing down a short "script" if you are nervous about speaking up; many people I know do this before professional lectures). Finally, talking to others in a medium-sized group is an important skill you **should** learn; and learning it in the cozy confines of a Caltech classroom is actually easier than in many other situations.

Does the weight on class contribution mean you have to come to class? Of course not. Attendance is not graded, but contribution is. But you won't get contribution points unless you contribute (contribution could also include notes on course material which enhance the class discussion, provided they are sent to me in advance).

The exam will be a two-day open-book take home exam. Here is the collaboration policy for BEM/Econ 146: Students should work alone on the homework. They cannot discuss the problems with anyone except the professor and TA(s).

Assignments:

All homework's are due noon PST on assigned date. Submit hardcopy to Andrea Robbett (Baxter 1st floor mailboxes). NOTE that for Homeworks 2 & 4 you need to do only ONE.

Homework 1: Out 13 Jan, Due 18 Jan.

Homework 2: Submit examples by Friday, 4 Feb of "incentives gone wild"—that is, cases where incentives were changed and a behavior that resulted which is the opposite of what was hoped for, or which has some unfortunate unintended consequence. (2 page max).

Homework 3: Out 18 Feb, Due 23 Feb.

Homework 4: Due 7 March. Submit a question you would like to discuss on the last day of class (1/2 page maximum; these can be emailed to Andrea with body of the question in the email, or printed and put in her mailbox).

Final exam: Available 12 March, due 16 March

Readings:

Johannsen, Ellingsen "Paying for respect" J Econ Perspectives 2007

Prendergast, "The provision of incentives in firms" J Economic Literature, 1999.

Brian Hall and Kevin Murphy, “The trouble with stock options” Journal of Economic Perspectives, 2003 (Kevin J. Murphy at USC is a real expert, look at his website at <http://www-rcf.usc.edu/~kjmurphy/>)

<http://www-personal.umich.edu/~kathrynd/JEP.StockOptions.pdf>

Bebchuck and Grinstein, “The growth of executive pay” Oxford Economic Papers, 2005

<http://www.law.harvard.edu/faculty/bebchuk/pdfs/Bebchuk-Grinstein.Growth-of-Pay.pdf>

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January 3	Beginning of instruction - 8:00 a.m.
January 4	Undergraduate Academic Standards and Honors Committee - 9:00 a.m.
January 17	Martin Luther King Day (Institute holiday)
January 21	Last day for adding courses and removing conditions and incompletes
February 2-8	Midterm examination period
February 14	Midterm deficiency notices due - 9:00 a.m.
February 21	President's Day (Institute holiday)
February 23	Last day for dropping courses, exercising pass/fail option, and changing sections
February 24 – March 9	Registration for spring term 2010-11
March 9	Last day of classes
	Last day to register for spring term 2010-11 without a \$50 late fee
March 10-13	Study period
March 14*-16	Final examinations, winter term 2010-11
March 16	End of winter term 2010-11
March 17-27	Spring recess
March 23	Instructors' final grade reports due - 9:00 a.m.

Class #	date	topics	reading
1	3 Jan	Basic econ: Marginal analysis (water vs diamonds, work) Opportunity cost Utility, information, constraints Behavioral economics Decisions, incentives and evaluation Efficiency & no free lunch Disasters and frauds	OE chap 1
2	5 Jan	Property rights Specialization, gains from trade, comparative advantage Central planning vs decentralization	
3	10 Jan	Human nature: Job satisfaction, social preferences, citizenship	Johannsen+ JEP 07
4	12 Jan	Game theory: Dominance, cognitive hierarchy, equilibrium	
5	19 Jan (17 th off)	Hidden information, hidden action Signalling, screening	
6	24 Jan	Wage determination MRP, human capital, compensating differentials, upward sloping wage profiles, wage compression,	OE Chap 2
7	26 Jan	discrimination, internal labor markets	

8	31 Jan	Basic agency Risk-incentive tradeoff, multi-tasking, Empirical evidence	Prendergast JEL 99
9	2 Feb	Monitoring, evaluation, tournaments, intrinsic-extrinsic (crowding out)	
10	7 Feb	Incentives gone wild	Submit examples
11	9 Feb	Companies Decision rights and boundaries of the firm Mergers & restructuring Bundling jobs and divisions Matching and worker-job fit	OE Chap 3
12	14 Feb	Peer effects, groups and teams Social networks: Board interlocks	
13	16 Feb (21 st off)	Corporate culture, leadership	
14	23 Feb	Managers and boards Board structure Governance Shareholder-based governance versus “refereeing” team play Family firms	OE chap 4
15	28 Feb	CEO pay	Bebchuck & Grinstein, OEP 05; Hall & Murphy JEP 03
16	2 Mar	Strategy:	OE chap 5

		core competence resource-based view IO (good markets) view	
17	7 Mar	Social responsibility	
18	9 Mar	Wrapup: Questions to discuss	(Submit questions)

Wrapup preview: Major principles in organizational economics on one page

- Firm is a nexus of contracts
Boundaries determined by efficiency:
Better to pay a fixed wage & give authority to firm? (staff/make)
Or pay a piece rate & give authority to worker? (freelance/buy)
- Centralization/decentralization
tradeoffs between local information & responsibility (decentralize)
& firmwide coordination (centralize)
- Bundling of tasks (jobs, divisions, firms)
- Balance residual decision rights with incentives
Those who decide should get credit *and* blame
- Culture is important ("how business is done")-- fills in incompleteness in contracts
Ideas, artifacts (rituals, role models), institutions (rules)
- Principal-agent theory:
Agents exert unobservable effort.
Incentives increase effort, also increase risk
- Incentives are a sharp knife
Easy to incentivize the wrong thing or drive out the right thing
(e.g. body counts in Vietnam, school testing)
Solution: Mix subjective and objective evaluation (e.g. tenure)
- Most jobs are in "internal labor markets"
Promotion & referral favor insiders or friends
Repeated game, promotion tied to pay, "gift exchange" of effort
- Restructuring
Most mergers benefit target (poorly-managed), acquirers overpay slightly
LBOs worked mid-1980s to shift capital out of declining industries
Markets are good at innovation (hard to value Amazon internally)
& capital reallocation subject to influence costs (e.g. downsizing).
- Ethics: Shareholder primacy model has debatable legitimacy, dangerous to export
Shareholders should only be first if other claimants are savvy, protected
Requires security analysts, courts, acc'ting, consumer info, unions
Capital markets may misprice the firm
Don't know precisely how to incentivize top managers

