Syllabus version 11/16/04

Class hours **M 130-3 Baxter 127**

Prof. Colin Camerer Baxter 101, x4054 camerer@hss.caltech.edu

Office Hours MW 3-4 and by appointment.

Unbelievably efficient assistant: Karen Kerbs Baxter 332, kkerbs@hss.caltech.edu

TA: Ian Krajbich (krajbich@its.caltech.edu). Office hours TBA (to be synch’d with homework due dates).

Text: Lecture notes, Alec Klein, *Stealing Time*, some other readings TBA.

Note: I am planning to write a book about this material based on this class. Previously we used Brickley, Smith and Zimmerman, *Managerial Economics and Organizational Architecture* (3rd edition). McGraw-Hill/Irwin, 2001. I will put this on reserve and you may want to consult it for background.

**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 they’re there.**

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 beginning of class Wednesday, October 6.

**Grades**

Grades will be determined (one third each) by three problem sets, a final examination, and "class contribution". 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. **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 (Karen Kerbs will have hardcopies of all such readings).

**Contribution**

Let me explain how "class contribution" works. 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). An important part of education in those 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'll 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 Wednesday, October 6.

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 another student has. Reminding the class of something relevant in the reading.

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 coming to class and 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.
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 or 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).

Two more things: If you are very shy and don’t like to speak up in a class, you can do an optional fourth homework instead, which will count as one third of your contribution (i.e., instead of 3/9 weight on contribution, you will have 2/9 weight). The optional homework is to write a synopsis of an empirical article on “theory of the firm” or another article of your choosing which is relevant to the class (subject to my approval). I will give a list of these articles you can choose from shortly.

Also on November 15 (tentatively) we will have an in-class debate among yourselves on the issue of whether CEO compensation is too high or is just right. We will have two teams on either side of the debate, 1-3 people per team. Each team member will earn 0-10 contribution points depending on how well prepared they are and the quality of the oral argument. Signup is first-come, first-served.

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).

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<thead>
<tr>
<th>week (dates)</th>
<th>Topics</th>
<th>Readings</th>
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Note on schedule: I will reschedule about four classes, probably in 1 or 2 three-hour sessions, TBA. Also homework assignments are a little fluid, will be resolved by 10/1

I: Basic economics, game theory, and organizational architecture

1 9/27,29 Introduction & basic econ. Chapter 1
   Central concepts: Decisions, incentives and evaluation
   Disasters and frauds
   Marginal analysis (water vs diamonds, work)
Opportunity cost
Utility, constraints, incentives
Models of human nature: Money, job satisfaction, citizenship, traits
Property rights (Barry Bonds baseball case)
Specialization, gains from trade, comparative advantage
(example: twins on Great Race; Survivor)
Supply and demand
Central planning vs decentralization (bread, claiming races, private vs publicly funded exploration, BSZ p 56)
Contracting costs and firm boundaries

Background reading: http://www.courttv.com/trials/baseball/ballsold_ctv.html
http://www.courttv.com/trials/baseball/docs/BondsVerdict.PDF [This is an interesting 13-page reading to see how stylishly judges write, and how legal jargon and precedent guide legal conclusions.]

2 10/4,6  Game theory & incentives  Chapter 1 (cont’d)
Dominance, Nash equilibrium, repeated games
Incentives: Hidden information, hidden action, signaling, the holdup problem
Reputation

(Note: you cannot add the class after 3 pm Wed Oct 6)

II: Incentives and internal labor markets

3-5 10/13,25,27  Workers  Chapter 2
The basic agency model in detail—the incentive-risk tradeoff
Empirical evidence & limits on the agency model in practice
The variety of incentive problems
Performance evaluation. Case study: Moneyball
Multitasking
Do incentives work?
Crowding out
Incentives gone wild

What determines wages?

- Human capital, compensating differentials, discrimination, upward sloping wage profiles, wage compression, internal labor markets
- Efficiency wages & gift exchange. In-class experiment

Matching markets: Medical residents, sororities, and bowl games. Unraveling

Note: No class on Mon 11 October, Mon 18 October, Wed 20 October

Questions to think about: Is there grade inflation? Does it vary across universities? If there is grade inflation, what might cause it?

6-7 11/1,3,8 Companies Chapter 3
Decision rights and boundaries of the firm
Make or buy
Four theories of the firm: Haggling, Adaptation, Property Rights, Incentive system
Bundling jobs and divisions
Peer effects and teams
Social networks: Board interlocks
Culture
Caltech honor code
Leadership

Optional homework: Empirical articles on the theory of the firm, or an

NOTE: NO CLASS ON WED, 10 November. RESCHEDULED CLASS THURSDAY 11 NOVEMBER, 6-8 PM BAXTER 25. PIZZA FOR DINNER. WE WILL WATCH THE MOVIE ‘STARTUP.COM’ AND HAVE A SHORT DISCUSSION AFTERWARD.

Questions to think about while watching “Startup.com”. Did they have a good business idea? What went right? What went wrong? [Note: No need to write anything about this.]

8 11/15,17 Manager and boards Chapter 4
CEO compensation
Succession
Mergers (when & why do acquirers pay too much?; HK and AMS)
What is governance? Large shareholders, shareholder activism
Shareholder-based governance versus “refereeing” team play
Governance (corporations are like countries, Gompers-Metrick)
New changes in governance (Sarbanes-Oxley etc)

Debate! Wed, Nov 17:
Resolved: CEO’s are paid what they are worth, in a form that maximizes shareholder value
One team (Pro—agree): Weihao Xu, Ming He
Other team (Con—disagree): Doug Hanley, Will Sladek (+possible 3rd TBA)

Format: Coin flip for who goes first.
Opening statements: 10 minutes each.
5 minutes rebuttal.
30 minutes questions from students (1 minute responses)/CFC
We will have 1-3 person debate teams on each side and have a debate in class for 60 minutes. If you choose to participate this will count as 0-10 points toward your contribution (depending on evaluation of the quality of your preparation and arguments). Both sides will be scored 0-10 points by the class (weight 50%) and by me (weight 50%).

Useful background reading for debaters:
Articles by Hall and Kevin Murphy, and by Bebchuck and Fried, in 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/)

III: Topics
9 11/22,24 Startups and strategy BSZ 8
AOL Time Warner book, Stealing Time (11/26, be prepared for class discussion)
Business strategy, core competence (Prahalad-Hamel), resource-based view,
IO view of choosing “good” markets (Porter)
Entrepreneurship

7
Homework #3 (due at the start of class 11/24, 130pm): AOL Time Warner (Stealing Time)

Why did AOL want to merge? Why did Time Warner want to merge? Was the AOL Time Warner merger a good idea (a) for AOL shareholders; (b) for Time Warner shareholders? Discuss business synergies—planned and realized--; and differences in culture. (Write no more than two pages total. Be concise!)

Additional reading: Klein book “Stealing Time”.

10 11/29 Spillover, wrapup and misc Q&A: What have we learned?

Note: No class on Wed 12/1

Final available TBA
Wrapup: 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