Syllabus for Managerial Economics, ECO 351M
Spring Semester, 2019, Unique #34370
Maxwell B. Stinchcombe

Basics: We will meet Mondays and Wednesdays, 2:00-3:30 p.m. in BRB 1.118.

Contact and Office Hours:
- Stinchcombe: e-mail, `max.stinchcombe@gmail.com`; office, BRB 2.102A; phone, 512-475-8515; office hours, Tuesday 2-4 p.m. and by appointment or drop-in.
- Byungjae Kim (TA): e-mail, `byungjaekim@utexas.edu`; office, BRB 3.154; office hours, Fridays 1-3 p.m.

Required Textbooks: The books we will use are

W. A. Klein, J. C. Coffee, and F. Partnoy. *Business Organization and Finance: Legal and Economic Principles.* Foundation Press, New York, 2010.

D. M. Kreps. *Microeconomics for Managers.* W. W. Norton & Company, New York, NY, 2004.

Articles: I will also circulate, via e-mail, handouts and several articles. Early in the semester, we will spend time on the following two.

F. Hayek. The use of knowledge in society. *The American Economic Review*, 35(4):519–530, 1945.

R. Amir. Supermodularity and complementarity in economics: an elementary survey. *Southern Economic Journal*, 71(3):636–660, 2005.

Recommended: The following is a wonderful source for how economics and market intuitions carry over into the study of of organizations,

P. Milgrom and J. Roberts. *Economics, organization and management.* Prentice Hall, New Jersey, 1992.

Expectations: From the second class onward, I expect you to have looked at the readings before the lecture on the topic. If you do not read the material before the class times, you will suffer needlessly. I will cover parts, not all, of the material in the readings from a different perspective and with different emphases. If you do not read the material either before or after the corresponding lectures, you will probably fail the course.

More generally, I expect you to take an activist attitude toward your education, to figure out when you do and do not understand a topic, and to take the appropriate steps to remedy any lacks. Often the appropriate first step is to ask for advice.

Background: I will assume that you have had a good introduction to microeconomics (supply and demand functions, cost functions, market equilibrium, indifference curve analysis). I will also assume: a good working knowledge of differential and integral calculus in several variables; competence with the basic concepts from probability and statistics,

including mean, median, variance, probability density functions (pdf's), cumulative distribution functions (cdf's), the strong law of large numbers and the central limit theorem.

Evaluation: There will be one homework assignment for each of the 5 topics described below. 40% of your grade will be based on these homework assignments. An additional 20% of your grade will be based on the in-class mid-term exam, on Wednesday March 6. The remaining 40% of your grade will be based on your final exam.

- As needed, I encourage you to work together on the homeworks, and to consult with me and the TA.
- It may be tempting to free ride on the work of others, more bluntly, to copy the answers. I strongly recommend against this. The two exams will consist almost entirely of variants of the homework problems. I understand the word "variant" in a wide sense. This means that if you do not know how to solve the problems or do not know the logic behind the solution strategy, then you will not be prepared to give a satisfactory performance on the exams.
- The homeworks and the exams will be designed to test your understanding on three levels: first and most basically, do you understand the meanings of the terms and concepts used; second, can you use the concepts to solve well-specified problems; and third, can you see parallels between different situations that allow you to generalize from well-specified problems to new situations. This last is the most important, and it builds on the previous two.

Missed assignments/exams: I will post solutions to the assignments directly after the lecture meeting in which they are due. Therefore, I will not accept any late assignments. If you must miss the mid-term exam for university business, you must arrange this with me well in advance, and we will shift the mid-term credit equally to the homeworks and final exam (so that 50% of your credit will come from each of these sources). If you miss the final exam without a medical excuse, you will fail the course, for medical excuses, we will follow university policies and procedures.

Topics Overview: The course will cover some of the important aspects of the organization of the economy and of economic organizations. An overarching theme is the synergy between having information, incentives, and authority coordinated with each other. This theme will show up, in various forms in our coverages of: efficiency and its implications; forms of competition and their implications; coordination both through prices/markets and through management; the legal forms of common contracts, their effects on information and incentives, and the implications for economic behavior.

Models: The tools we will use are what economists call "models." This are spare and parsimoniuous representations that, hopefully, capture the important forces at work. We will usually ask simple questions of the models, questions such as, "What will happen to insurance choices as liability patterns change?" Most of the choices that one makes involve random outcomes. To answer questions about how much effort should be spent to control the randomness, or how many resources should be spent on acquiring better information, we will need to spend time on choice under uncertainty. The main model for this is called expected utility theory, and its applications include diversification, responses to liability, and the value of information.

A More Detailed Outline: First Half

Topics 1: Review of marginal logic and optimization; the monotone comparative statics generalizations; demand curves and firm behavior; micro foundations for demand curves; prices as coordinating devices and efficiency implications; substitutability and complementarity.
Readings: Handout on optimization, as well as Chapters 1-5 in

> D. M. Kreps. *Microeconomics for Managers*. W. W. Norton & Company, New York, NY, 2004.

Background for this should be contained your previous intermediate microeconomics textbook, and you can also find a good coverage in R. Preston McAfee, Tracy R. Lewis and Donald J. Dale's *Introduction to Economic Analysis*, a textbook freely available on-line.

Sections III-VI in

> F. Hayek. The use of knowledge in society. *The American Economic Review*, 35(4):519–530, 1945.

The elementary parts of the following are an alternative to the in-lecture and handout coverage of monotone comparative statics methods,

> R. Amir. Supermodularity and complementarity in economics: an elementary survey. *Southern Economic Journal*, 71(3):636–660, 2005.

Topics 2: Sole proprietorship; control, risk and moral hazard; choice under uncertainty, leverage, investment in LLCs.
Readings: Hand-out plus Chapters 1 and 4.I and 4.II in

> W. A. Klein, J. C. Coffee, and F. Partnoy. *Business Organization and Finance: Legal and Economic Principles*. Foundation Press, New York, 2010.

Chapters 15, 17, and 18 in

> D. M. Kreps. *Microeconomics for Managers*. W. W. Norton & Company, New York, NY, 2004.

Topics 3: Partnerships and LLCs.
Readings: Chapter 2 in

> W. A. Klein, J. C. Coffee, and F. Partnoy. *Business Organization and Finance: Legal and Economic Principles*. Foundation Press, New York, 2010.

Midterm, Wednesday, March 6.