Syllabus for Managerial Economics, ECO 351M Fall Semester, 2016, Unique #34115 Maxwell B. Stinchcombe

Organization: We will meet Mondays and Wednesdays, 9:30-11 a.m. in BRB 1.118.

Contact info:

- Stinchcombe: e-mail, max.stinchcombe@gmail.com; office, BRB 2.102A; phone, 512-475-8515.
- Byungjae Kim (TA): e-mail, byungjaekim@utexas.edu; office, BRB 4.102.

Office hours: Stinchcombe, Tuesdays 9:30-11:30 a.m., 2-3:30 p.m., and by appointment; Byungjae Kim, Fridays, 10-noon.

Required Textbooks: The books we will use are

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

and

M. Mazzucato. The entrepreneurial state: Debunking public vs. private sector myths. Anthem Press, London, 2015.

Articles: I will circulate, via e-mail, the following articles.

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

and

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 the economics 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 covered 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, a step that is much more productive if you have first asked yourself what you need to understand.

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 6 topics described below. 40% of your grade will be based on the best 5 of the 6 homework assignments. An additional 20% of your grade will be based on the in-class mid-term exam, on Wednesday October 12. The remaining 40% of your grade will be based on your final exam, tentatively scheduled for Monday, December 12, 7-10 p.m.

- 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 frome 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.

Some of the details: To make my work and the work of the TA easier, you are required to hand in hard copy at the beginning of the lecture meeting when the assignment is due, and to have submitted an electronic copy by that time as well.

Topics Overview: The course is aimed at giving you an understanding of important aspects of the organization of the economy and of economic organizations. This includes, but is not limited to understanding: efficiency and its implications; forms of competition and their implications; coordination both through prices/markets and through management; contracts, information and incentives as parts of the problems of motivation for economic behavior; contracts and ownership. Throughout, key concepts will be opportunity cost, equalization of marginal net benefits, comparative statics and their use in analyzing problems and prospects, discounting and net present value, choice under uncertainty and the value of information, moral hazard and adverse selection, and the power of commitment in strategic interaction.

Detailed Outline

Topics 1: Review of marginal logic, demand curves and firm behavior, micro foundations for demand curves; prices as coordinating devices and efficiency implications; comparative statics via substitutability and complementarity.

Meetings: August 24, 29, 31, and September 7.

Readings: Chapters 3, 4, 5 and 9 in

Kreps. Micro for Managers. Norton.

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 coverage of monotone methods,

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

Topics 2: Discounting and present value.

Meetings: September 12, 14, and 19.

Readings: Hand-outs plus Chapters 8, 9 and 10 in

Kreps. Micro for Managers. Norton.

Topics 3: Choice under uncertainty; diversification and leverage.

Meetings: September 21, 26, 28, October 3 and 5.

Readings: Chapters 15, 16 and 17 in

Kreps. Micro for Managers. Norton.

Chapters 1, 2 and 3 in

Mazzucato. The entrepreneurial state. Anthem.

Review of first half, Monday October 10. Midterm, Wednesday October 12

Outline (cont.)

Topics 4: Pricing and forms of competition (Bertrand, Cournot, Stackelberg); franchises,

two part tariffs; the power of committment. **Meetings**: October 17, 19, 24, 26 and 31.

Readings: Chapters 6, 7, 11, 12, and 21 in

Kreps. Micro for Managers. Norton.

Sections III-VI in

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

Topics 5: Value of information; differential information; signaling; screening; incentive design.

Meetings: November 2, 7, 9, and 14. Readings: Chapters 18 and 19 in

Kreps. Micro for Managers. Norton.

Topics 6: Externalities and public goods; research and development.

Meetings: November 16, 21, 28, 30 and December 5

Readings: Chapter 14 in

Kreps. Micro for Managers. Norton.

Chapters 4 - 10 in

Mazzucato. The entrepreneurial state. Anthem.