

Behavioral Economics

Fall 2008

MW: 1:30-3:00 pm , SH 222

Professor Erte Xiao

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Office Hours by appointment. (I check email often and am flexible)

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Course Overview:

Over the past decades research in economics has increasingly incorporated fields such as psychology, sociology, biology. Together with this, the methods in economic research have expanded to include designed experiments and more recently advanced technology such as fMRI. Findings from such empirical research, along with interactions with other fields using the new methods, provide valuable input for the development of new models of economic behavior and improve the applicability of economic theories.

This course aims to introduce findings in psychology, behavioral and experimental economics and discuss the related implications in economic exchange. By learning how people might behave ‘irrationally’ (as defined by standard economists), you will gain insight into real world problems, such as policy making, contract designing, marketing, management.

This course has a page on the blackboard system. All course materials (e.g. homework, lectures) will be posted there, including this syllabus. The syllabus is subject to change (I will announce changes); please check online for the current version if you have questions.

Readings:

There is not a text book for this class. All the readings will be posted on the blackboard. The readings are typically related to, but will not directly overlap with class materials.

Grading:

The course grade will be based on class participation (20%), an essay write up and presentation (30%), homework exercises (15%), Test 1 (15%) and Test 2 (20%). Students are expected to hand in their homework at the beginning of class on the day it is due. The two tests will consist of short answer questions. Detailed information about the essay write up and presentation is given below.

One way to learn efficiently is to use what you learned in the class to shed light on phenomena in naturally occurring environments. Toward this end, each student must complete a “behavioral economic naturalist” writing assignment (a la Robert Frank – see “The Economic Naturalist”). You should pose and answer an interesting question about some pattern of vents or behavior that you have personally observed. Examples of questions from Frank’s book (submitted by students) include: “Why do the keypad buttons on drive-up cash machines have Braille dots?,” “Why do color photographs sell for less than black-and-white ones?,” and “Why is it more expensive to transfer funds between banks electronically than send a check through the mail?” Of course, your questions and answer should appeal to behavioral principles. Your essay is limited to 1000 words and should be written to be intelligible to someone without formal training in economics, i.e. it should be non-technical. Although the assignment is short, it will take some thought. The quality of the question is as important as the quality of your answer.

You will also present your essay on either November 19th or November 24th. Your presentation date will be randomly decided. Your essay is due on the day and time of the final exam for this class as posted on the CMU calendar.

Lecture Schedule (Tentative, check Blackboard or class slides for updates)

Date	Topic
Aug. 25	Introduction
Aug. 27	Expected Utility theory
Sept. 1	No class- Labor Day
Sept. 3	Context dependence (1)
Sept. 8	Context dependence (2) & Reference dependence and loss aversion (1)
Sept. 10	Reference dependence and loss aversion (2)
Sept. 15	Mental accounting (1)
Sept. 17	Mental accounting (2) & Judgment of probability (1)
Sept. 22	Judgment of probability (2)
Sept. 24	Perception of randomness & Representativeness (1)
Sept. 29	Representativeness (2) & Availability
Oct. 1	Anchoring and adjustment & correlation and causality
Oct. 6	Overconfidence and hindsight bias
Oct. 8	Risk preference
Oct.13	Prospect theory
Oct. 15	Wrap-up, Review
Oct. 20	Test 1
Oct.22	Intertemporal choice
Oct.27	Information and group thinking (1)
Oct.29	Information and group thinking (2) & Bootstrapping and gut thinking
Nov.3	Introduction to game theory
Nov. 5	Social dilemmas
Nov 10	Incentives
Nov 12	Emotion and decisions
Nov. 17	No class (work on your essay)
Nov. 19	Essay presentation #1
Nov. 24	Essay presentation #2
Nov. 26	No class-Thanksgiving
Dec. 1	Review
Dec. 3	Test 2

Reading List

Introduction

1. Mullainathan, S. and Thaler, R. Behavioral Economics

Expected Utility theory

2. Baron, John. Ch. 10. "Normative Theory of Choice", in *Thinking and Deciding*. Cambridge University Press.

Context dependence

3. Schwartz, B. (2005). "Missed Opportunities", Chapters 6 in *The Paradox of Choice: Why More is Less*, HarperCollins Publishers, Inc. New York
4. Gladwell M. (2005). "The Warren Harding Error: Why We Fall For Tall, Dark, and Handsome Men", Chapter 3 in *Blink: the power of thinking without thinking*. Little, Brown and company, New York.

Reference dependence and loss aversion

5. Kahneman, Daniel, Knetsch, Jack L., and Thaler, Richard H., "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias." *Journal of Economic Perspectives*, 1991, pp193-206.
6. Johnson, E.J., and Goldstein, D.G. (2003). Do defaults save lives? *Science*, 302, 1338-1339.

Mental accounting

7. Thaler, "Mental Accounting and Consumer Choice", *Marketing Science*, 1985

Judgment of probability

8. Dawes, Robyn M. "Probabilistic Rationality and Irrationality", *Everyday Irrationality*, Westview Press, 2001, pp77-92.

Perception of randomness

9. Belkin, L. (2002). "The Odds of That." *The New York Times*. August 11th
10. Gilovich, T. and Tversky, A. (1989). "The Cold Facts About the 'Hot Hand' In Basketball." *Chance*, 2(1), pp. 16-21.

Representativeness

11. Tversky, A. and Kahneman, D. "Judgement under uncertainty: Heuristics and biases", *Science*, 185, 1974, p.1124-31.
12. Gawande, A. (1999). "The Cancer Cluster Myth." *The New Yorker*, February 8th, 1999. pp.34-37.

Availability

13. Gigerenzer, G. (2004). "Dread Risk, Sept. 11, and Fatal Traffic Accidents." *Psychological Science*. 15(4), pp. 286-7.

Anchoring and adjustment

14. Hastie R. and Dawes R. (2001). "Anchoring and Adjustment." Chapter 5 in *Rationality in an Uncertain World*.

Causality and covariation

15. Redelmeier, D. and Tversky, A. (1996). "On the Belief that Arthritis Pain is Related to the Weather" *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 93, No. 7. pp. 2895-2896.

Overconfidence and hindsight bias

16. Russo and Schoemaker, "Managing Overconfidence", *Sloan Management Review*, 1992, Vol. 33, No. 2, pp. 7-17

Risk preference

17. Rabin, Matthew and Thaler, Richard "Anomalies: Risk Aversion", *Journal of Economic Perspectives*, 2001, 15(1), 219-232 .

Choice under Uncertainty: Prospect Theory

18. Colin F. Camerer "Prospect Theory in the Wild: Evidence from the field",

Review

19. John S. Hammond, Ralph L. Keeney, Howard Raiffa, "The Hidden Traps in Decision Making" *Harvard Business Review Article*, January 01, 2006, pp118-126.

Intertemporal choice

20. Loewenstein, G., & Thaler, R. H. (1989). Anomalies: Intertemporal choice. *Journal of Economic Perspectives*, 3, 197-201.

Information and group thinking

21. Bazerman, Max H.; Chugh, Dolly. "Decisions without blinders", *Harvard Business Review*, 2006, Vol. 84 Issue 1, p88-97.
22. Sunstein, Cass R. "When Crowds Aren't Wise." *Harvard Business Review*, Sep2006, Vol. 84 Issue 9, p20-21.

Bootstrapping and gut thinking

23. Dawes, R.M. (1979). The Robust Beauty of Improper Linear Models in Decision Making. *American Psychologist*, Vol 34(7), pp571-582
24. Gladwell M. (2005). "The locked door: The secret life of snap decisions", Chapter 2 in *Blink: the power of thinking without thinking*. Little, Brown and company, New York.

Introduction to game theory

25. Camerer, Colin F. *Behavioral Game Theory. Experiments in Strategic Interaction* , Princeton University Press, Princeton, New Jersey, 2003, pp1-24

Social dilemmas

26. Baron, John, "Social dilemmas: cooperation versus defection", *Thinking and Decision*, Cambridge University Press, 2000, Chapter18, pp 433-462
27. Dubner and Levitt (2005) "Why Vote?", *New York Times Magazine*, November 6.

Incentives

28. Gneezy, Uri and Rustichini, Aldo. "A Fine Is A Price." *Journal of Legal Studies*, 2000, 29(1).pp. 1-17.
29. Gneezy, Uri and Rustichini, Aldo. "Pay Enough or Don't Pay at All." *Quarterly Journal of Economics*, 2000b, 115(2), pp. 791-810.

Emotion and decision

30. Morse, Gardiner, "Decisions and Desires" *Harvard Business Review*, 2006 Jan;84(1):42, 44-51
31. Gladwell, M. "Big and bad: How the S.U.V. ran over automotive safety". *New Yorker*, January 12, 2004. 28-33.