

#### **Course Syllabus**

INSTRUCTOR Professor Katy Milkman

CLASS MEETINGS Tuesdays and Thursdays

1:30-2:50PM

OFFICE HOURS Anytime. Please email me, and we'll set up an appointment.

OFFICE LOCATION Jon M. Huntsman Hall 561

EMAIL kmilkman@wharton.upenn.edu

PREREQUISITES This course does not require nor is it related to OPIM101. No

advanced mathematical training is required for this course, although

having taken an introductory probability/statistics course is

probably useful.

#### 1. Overview

#### 1.1 Background

Over the last 30 years, psychologists and economists have joined forces to study how people process information and actually make decisions, rather than how they would make decision if they were fully rational and selfish. This research program in "behavioral economics" has provided an understanding of how people's decisions deviate from "optimal" choices as well as the consequences of such deviations. This course is devoted to understanding the nature, causes and implications of these limitations. The first two thirds of the course will focus on when individuals make decisions that deviate from the predictions of economics, and the final third of the course will focus on implications of these systematic "decision biases" for managers and policy makers.

#### 1.2 Objectives

The course has two main objectives. The first is improving the ability of the student (as a future manager) to influence the behavior of others, be they consumers, employees or people outside of a business relationship altogether. This will be accomplished by building on the toolbox that standard economics provides for influencing behavior (namely, incentives and information) with the insights from the aforementioned stream of research in behavioral economics.

The second objective is to improve the quality of students' own managerial decisions, primarily by enhancing their intuitive empirical ability. People are poor intuitive statisticians, meaning that when they 'just think' about situations for which some data or casual observations exist, they tend to make serious inferential errors, in turn leading to systematically biased decisions. We will study some errors that are particularly important for real world managerial settings and look for easy-to-implement solutions.

#### 1.3 Instruction Format



The course is lecture based. It includes two cases. Class discussion is encouraged.

#### 2. Logistics

#### 2.1 Readings

Two books are required for class:

- (1) Thaler, R.H. & Sunstein, C.R. (2008). <u>Nudge: Improving Decisions about Health, Wealth,</u> and Happiness. Yale University Press: New Haven, CT.
- (2) Cialdini, R.B. (1984). <u>Influence: The Psychology of Persuasion</u>. Harper Collins Publishing: New York, NY.

Both are available for purchase at major online retailers and at the Penn book store. They are popular press books rather than textbooks.

Additional required readings are available in .pdf format from webCafé and through Study.net (readings only available through Study.net are subject to copyright restrictions).

#### 2.2 Grading

Final grades will be determined by aggregating performance on the following:

- (1) Midterm Exam (30%)
- (2) Homework (15% total)
- (3) Class Participation (15% total)
- (3) Final Group Project (40% total)

#### 2.2.1 Midterm Exam (Tuesday, March 23<sup>rd</sup>)

The midterm will contain short-answer and multiple choice questions and will take about an hour and fifteen minutes to complete. Sample midterms will be posted on webCafé.

#### 2.2.2 Homework

Five homework assignments will be due throughout the term. Each will involve responding to an online quiz. Assignments will involve responding to survey and short-answer questions as well as writing short essays. Your performance on homework will be assessed throughout the semester and will influence your grade. **Homework is always due by midnight the evening before class**.

#### 2.2.3 Class Participation

You should come to class prepared to actively discuss the concepts in the readings. Your goal is to make comments that significantly advance the class discussion, so quality is more important than quantity (but some quantity is necessary for quality to be judged). Attendance will account for 50% of your class participation grade.

#### 2.2.4 Final Project



Everyone will take part in a group project (3-4 people per group) that will involve applying an idea from the first two thirds of this course to a managerially relevant field setting. The group will develop a proposed behavioral intervention to solve a managerial problem. We'll talk more about the project as the course evolves, but the basic idea is to apply one of the topics from this course. For example, a managerial problem might be high rates of worker absenteeism in a US manufacturing facility. A behavioral intervention to address the problem might involve mailings to workers emphasizing low absenteeism rates among their peers.

- PROPOSAL (*Due March 30th*): Each group must submit a 1-page, single-spaced proposal of the idea they plan to design a test of, the setting of the test, and the basic test's design. I will provide feedback on these proposals. Prior to the proposal each group should plan on meeting with me to talk through several ideas and choose the best one to work on.
- PRESENTATIONS (*April 20<sup>th</sup> & 22<sup>nd</sup>*): In the last 2 days of class, your group will have 10-15 minutes to present your project.
- PAPERS (*Due April 27th*): Each group must submit a 10 page, double spaced paper providing a brief review of the literature that gave rise to the proposed intervention, a description of the managerial setting where the proposed intervention would be used, a description of the proposed intervention, and a description of the methods that are proposed for evaluating the effectiveness of the intervention.

#### 2.3 Class Policies

<u>Laptops and Cell Phones</u>: Laptops and cell phones are not permitted in class.

<u>Absences</u>: Absences will hurt your class participation grade because when you are gone the class can't benefit from your comments and insights on the material. If you are absent, *you should arrange beforehand with a classmate to take notes for you and pick up any assignments or handouts.* Don't compound one absence by being unprepared for the next session because you didn't pick up the necessary materials.

<u>Late Arrivals</u>: Please arrive on time. Late arrivals are extremely disruptive, will be noted, and will harm your class participation grade.

<u>Late Assignments</u>: Late assignments will not be accepted.

<u>Email Correspondence</u>: I am often, but not always, on email. Therefore, to make sure that you get any information you need well before deadlines, please email me at least *24 hours* before you need an answer, want to set up a meeting, etc.



#### 3. Course Outline

#	CLASS	TOPIC	ASSIGNMENT/ READINGS DUE
1	January 14th	Introduction	Reading: Krugman (2009)
2	January 19th	Normative Models of Behavior and Standard	<b>Due:</b> Online Quiz #1
		Incentives	Readings: Becker (1976); Levitt & Dubner (2005)
3	January 21st	Heuristics and Biases	Reading: Bazerman (2006)
4	January 26th	Prospect Theory	Readings: Thaler (1992); Camerer (2000)
5	January 28th	Preferences for Fairness	<b>Due:</b> Online Quiz #2
			Readings: Kahneman, Knetsch & Thaler (1986);
			Levitt & Dubner (2005)
6	February 2 <sup>nd</sup>	Cooperation	Reading: Thaler (1992)
7	February 4th	Intertemporal Choice and Want/Should Conflict	Readings: Thaler (1992); Milkman, Rogers &
/	rebluary 4	Intertemporal Choice and Want/Should Connict	Bazerman (2008)
8	February 9th	Commitment Devices and Mental Accounting	Due: Online Quiz #3
O	rebruary 5	Commitment Devices and Mental Accounting	Readings: Thaler & Sunstein (2008); Heath & Heath
			(2009)
9	February	Cognitive Dissonance, Confirmation Bias and	Readings: Tavris & Aronson (2007); Paulos (2003)
	11 <sup>th</sup>	Escalation of Commitment	g g ( ,, ( ,
10	February	The Challenger Launch Decision Case	Prepare: Challenger Case
	16 <sup>th</sup>		
11	February	Overconfidence, Bounded Awareness and	Readings: Russo & Shoemacker (2002); Bazerman
	18 <sup>th</sup>	Bounded Ethicality	and Chugh (2006); Banaji, Bazerman & Chugh
			(2003); Dunleavey (2007)
12	February	Social Norms, Conformity and Groupthink	Readings: Thaler & Sunstein (2008); Janis (1971)
10	23 <sup>rd</sup>	B .: OB .: MI	B 0 1: 0 : #4
13	February 25 <sup>th</sup>	Emotions & Decision Making	Due: Online Quiz #4
	25 <sup>th</sup>		Readings: Schwartz (2004); Ariely (2008); Lerner, Small & Loewenstein (2004); PhysOrg article
14	March 2 <sup>nd</sup>	Choice Overload and Affective Forecasting	Readings: Schwartz (2004); Frysory article
15	March 4th	Introduction to Field Experiments and Final	Readings: Ariely (2008); List (2008)
13	March 4	Project	Readings: Ariety (2000), List (2000)
16	March 16 <sup>th</sup>	Behavioral Finance at JP Morgan	Prepare: Behavioral Finance Case
17	March 18 <sup>th</sup>	Midterm Review	
18	March 23rd	Midterm Exam	
19	March 25 <sup>th</sup>	Libertarian Paternalism and Choice Architecture	Reading: Thaler & Sunstein (2008)
20	March 30 <sup>th</sup>	Influence I	<b>Due</b> : Final Project Proposal
		(Guest Lecture: Allan Domb, CEO Allan Domb Real	Reading: Cialdini (1984)
		Estate)	
21	April 1st	Influence II	Reading: Cialdini (1984)
22	April 6 <sup>th</sup>	Increasing Retirement Savings with Behavioral	Readings: Thaler & Sunstein (2008); Tritch (2007)
		Economics	
23	April 8 <sup>th</sup>	Improving Health with Behavioral Economics	Readings: Thaler & Sunstein (2008); Loewenstein,
		(Guest Lecture: Prashant Srivastava, CEO Evive	Brennan & Volpp (2007); Wansink (2006)
24	A:1 12th	Health)	Proc. Online Online #F
24	April 13 <sup>th</sup>	Improving Policy-Making and GOTV with	Due: Online Quiz #5
		Guest Lecture: Dr. Todd Rogers, CEO Analyst	Readings: Larrick & Soll (2008); Epley (2008); Nickerson & Rogers (2010)
		Institute)	Mickerson & Nogers (2010)
25	April 15 <sup>th</sup>	No Class – Work on Final Projects	
26	April 20 <sup>th</sup>	Final Project Presentations	
27	April 22 <sup>nd</sup>	Final Project Presentations	
28	April 27 <sup>th</sup>	Conclusion	<b>Due</b> : Final Project Paper
20	p 27	50	Readings: Milkman, Chugh & Bazerman (2009)



#### 4. Detailed Reading Assignment Schedule

Note: This schedule is subject to change based upon actual progress in class. New versions of the schedule, if any, will be posted on webCafé.

Where to Find Readings: (W) = Webcafé, (S) = Study.net, and (B) = Book (Nudge or Influence)

#### **CLASS 1: INTRODUCTION**

January 14, 2010

(W) Krugman, Paul. (2009) "How Did Economists Get it So Wrong?" *New York Times Magazine*. September 6, 2009.

#### **CLASS 2: NORMATIVE MODELS OF BEHAVIOR AND STANDARD INCENTIVES**

January 19, 2010

- (S) Becker, G. (1976). <u>The Economic Approach to Human Behavior</u>. Chicago: University of Chicago Press. *Introduction*.
- (S) Levitt, S.D. & Dubner, S.J.(2005). <u>Freakonomics: A Rogue Economist Explores the Hidden Side of Everything.</u> Harper Perrenial: New York. *Introduction.*

#### **CLASS 3: HEURISTICS AND BIASES**

*January 21, 2009* 

(S) Bazerman, M.H. (2006). <u>Judgement in Managerial Decision Making</u>. John Wiley & Sons: USA. *Chapter 2: Common Biases (Pages 13-33, skip Q12)*.

#### **CLASS 4: PROSPECT THEORY**

January 26, 2009

- (S) Thaler, R.H. (1992). <u>The Winner's Curse: Paradoxes and Anomalies of Economic Life</u>. Princeton University Press: Princeton, NJ. *Chapter 6: The Endowment Effect, Loss Aversion, and Status Quo Bias*.
- (S) Camerer, Colin F. (2000). "Prospect Theory in the Wild: Evidence from the Field." In D. Kahneman and A. Tversky (eds.), <u>Choices, Values, and Frames</u>. Cambridge University Press: Cambridge, UK.

#### **CLASS 5: PREFERENCES FOR FAIRNESS**

January 28, 2009

- (W) Kahneman, D., Knetsch J.L., and Thaler R. (1986) "Fairness as a Constraint on Profit Seeking: Entitlements in the Market," *The American Economic Review*, 76(4), p.728-741.
- (S) Levitt, S.D. & Dubner, S.J. (2005). <u>Freakonomics: A Rogue Economist Explores the Hidden Side of Everything.</u> Harper Perrenial: New York. *Chapter 1, Pages 19-24.*



#### **CLASS 6: COOPERATION**

February 2, 2009

(S) Thaler, R.H. (1992). <u>The Winner's Curse: Paradoxes and Anomalies of Economic Life</u>. Princeton University Press: Princeton, NJ. *Chapter 2: Cooperation*.

#### CLASS 7: INTERTEMPORAL CHOICE & WANT/SHOULD CONFLICT

February 4, 2009

- (S) Thaler, R.H. (1992). <u>The Winner's Curse: Paradoxes and Anomalies of Economic Life</u>. Princeton University Press: Princeton, NJ. *Chapter 8: Intertemporal Choice*.
- (W) Milkman, K.L., Rogers, T., & Bazerman, M.H. (2008). "Harnessing Our Inner Angels and Demons: What We Have Learned about *Want/Should* Conflicts and How that Knowledge Can Help Us Reduce Short-Sighted Decision Making," *Perspectives on Psychological Science*, Vol. 3, 324-338.

#### CLASS 8: COMMITMENT DEVICES & MENTAL ACCOUNTING

February 9, 2009

- (B) Thaler, R.H. & Sunstein, C.R. (2008). <u>Nudge: Improving Decisions about Health, Wealth, and Happiness</u>. Yale University Press: New Haven, CT. *Chapter 2: Resisting Temptation*
- (W) Heath, C. & Heath, D. (2009). "Why Customers Will Pay You To Restrain Them." *Fast Company*. March 18, 2009.

## CLASS 9: COGNITIVE DISSONANCE, CONFIRMATION BIAS, & ESCALATION OF COMMITMENT February 11, 2009

- (S) Tavris, C. and Aronson, E. (2007). <u>Mistakes Were Made (but not by me)</u>: <u>Why We Justify Foolish Beliefs, Bad Decisions, and Hurtful Acts</u>. Harcourt Books: USA. *Introduction & Chapter 1*.
- (W) Paulos, J.A. (2003). "The 9-11 Lottery Coincidence: Analysis Shows Such Coincidences Aren't So Unusual." *ABC News Report.* October 6, 2003.

#### **CLASS 10: THE CHALLENGER LAUNCH DECISION**

February 16, 2009

(S) Edmondson, A.C. & Feldman, L.R. (2002). <u>Group Process in the Challenger Launch Decision (A)</u>. Harvard Business School Press: Cambridge, MA.

## CLASS 11: OVERCONFIDENCE, BOUNDED AWARENESS & BOUNDED ETHICALITY February 18, 2009

(S) Russo, E.J. & Shoemacker, P.J.H. (2002). <u>Winning Decisions: Getting it Right the First Time</u>. Doubleday: New York. *Pages 74-89*.



- (S) Bazerman, M., & Chugh, D. (2006). Decisions without Blinders, *Harvard Business Review*. January 2006.
- (S) Banaji, M., Bazerman, M., & Chugh, D. (2003). How (Un)Ethical Are You? *Harvard Business Review*, 81(12), 56-64.
- (W) Dunleavey, M.P. (2007). "Basic Instincts: Disclosing Bias Doesn't Cancel Its Effects". *New York Times*. July 28, 2007.

#### **CLASS 12: SOCIAL NORMS, CONFORMITY & GROUPTHINK**

February 23, 2009

- (B) Thaler, R.H. & Sunstein, C.R. (2008). <u>Nudge: Improving Decisions about Health, Wealth, and Happiness</u>. Yale University Press: New Haven, CT. *Chapter 3: Following the Herd.*
- (S) Janis, I. L. (1971). "Groupthink." In H. J. Leavitt, L. R. Pondy & D. M. Boje (eds.), <u>Readings in Managerial Psychology</u>. The University of Chicago Press: Chicago, IL. *Pages 439-450*.

#### **CLASS 13: EMOTIONS & DECISION MAKING**

February 25, 2009

- (S) Schwartz, B. (2004). <u>The Paradox of Choice: Why More is Less</u>. Harper Collins: New York, NY. *Chapter 7: "If Only...": The Problem of Regret.*
- (S) Ariely, D. (2008). <u>Predictably Irrational</u>. Harper Collins: New York, NY. *Chapter 5: The Influence of Arousal*.
- (W) Lerner, J. S., Small, D. A., and Loewenstein, G. (2004). "Heart Strings and Purse Strings: Carryover Effects of Emotions on Economic Transactions." *Psychological Science*, 15(5), 337-41. (SKIM)
- (W) "Asking the Boss for a Raise." *PhysOrg.* http://www.physorg.com/news110472885.html

#### **CLASS 14: CHOICE OVERLOAD & AFFECTIVE FORECASTING**

March 2, 2009

- (S) Schwartz, B. (2004). <u>The Paradox of Choice: Why More is Less</u>. Harper Collins: New York, NY. *Chapter 1: Let's Go Shopping*.
- (W) Gertner, J. (2003). "The Futile Pursuit of Happiness," The New York Times, September 7, 2003.

## CLASS 15: INTRODUCTION TO FIELD EXPERIMENTS & FINAL PROJECT March 4, 2009

(S) Ariely, D. (2008). <u>Predictably Irrational</u>. Harper Collins: New York, NY. *Chapter 13: Beer and Free Lunches*.



(W) List, John A., "Homo Experimentalis Evolves," Science, July 11, 2008, 321(5886): 207-208.

#### **CLASS 16: BEHAVIORAL FINANCE CASE**

March 16, 2009

(S) Baker, M.P. & Sesia, A. (2007). "Behavioral Finance at JP Morgan." Harvard Business School Publishing: Cambridge, MA.

#### **CLASS 17: MIDTERM REVIEW**

March 18, 2009

#### **CLASS 18: MIDTERM**

March 23, 2009

#### **CLASS 19: LIBERTARIAN PATERNALISM & CHOICE ARCHITECTURE**

March 25, 2009

(B) Thaler, R.H. & Sunstein, C.R. (2008). <u>Nudge: Improving Decisions about Health, Wealth, and Happiness</u>. Yale University Press: New Haven, CT. *Introduction, Chapter 4: When Do We Need a Nudge?, Chapter 5: Choice Architecture, & Chapter 11: Objections.* 

#### CLASS 20: PERSUASION I Guest: Allan Domb March 30, 2009

(B) Cialdini, R. (1984). <u>Influence: The Psychology of Persuasion</u>. Harper Collins Publishing: New York, NY. *Introduction through Chapter 4.* 

#### **CLASS 21: PERSUASION II**

April 1, 2009

(B) Cialdini, R. (1984). <u>Influence: The Psychology of Persuasion</u>. Harper Collins Publishing: New York, NY. *Chapter 5 through Epilogue*.

## CLASS 22: INCREASING RETIREMENT SAVINGS WITH BEHAVIORAL ECONOMICS April 6, 2009

- (B) Thaler, R.H. & Sunstein, C.R. (2008). <u>Nudge: Improving Decisions about Health, Wealth, and Happiness</u>. Yale University Press: New Haven, CT. *Chapter 6: Save More Tomorrow*.
- (W) Tritch, Teresa. (2007). "Helping People Help Themselves." *The New York Times*. February 14, 2007.

## CLASS 23: IMPROVING HEALTH WITH BEHAVIORAL ECONOMICS Guest: Prashant Srivastava

April 8, 2009



- (B) Thaler, R.H. & Sunstein, C.R. (2008). <u>Nudge: Improving Decisions about Health, Wealth, and Happiness</u>. Yale University Press: New Haven, CT. *Chapter 11: How to Increase Organ Donations*.
- (W) Loewenstein, G., Brennan, T. & Volpp, K. (2007). Asymmetric Paternalism to Improve Health Behaviors. *Journal of the American Medical Association*, 298(20): 2415-2417.
- (S) Wansink, B. (2006). <u>Mindless Eating</u>. Bantam Books: New York, NY. *Chapter 1: The Mindless Margin*.

# CLASS 24: IMPROVING POLICY-MAKING AND GOTV WITH BEHAVIORAL ECONOMICS Guest: Todd Rogers April 13, 2009

- (W) Larrick, R.P. & Soll, J.B. (2008) "The MPG Illusion." Science. June 20, 2008: 1593-1594.
- (W) Epley, N. (2008). "Rebate Psychology." New York Times. January 31, 2008.
- (W) Nickerson, D.W. & Rogers, T. (in press). "Do You Have a Voting Plan? Implementation Intentions, Voter Turnout, and Organic Plan-Making." *Psychological Science*. (SKIM)

CLASS 25: NO CLASS - WORK ON PROJECTS

April 15, 2009

CLASS 26: FINAL PRESENTATIONS I
April 20, 2009

CLASS 27: FINAL PRESENTATIONS II
April 22, 2009

CLASS 28: CONCLUSION
April 27, 2009

(W) Milkman, K.L., Chugh, D., & Bazerman, M. (2008). "How Can Decision Making Be Improved?" *Perspectives on Psychological Science*, 4(4): 379-383.