Course Syllabus

INSTRUCTOR	Professor Katy Milkman
CLASS MEETINGS	Tuesdays and Thursdays, Jon M. Huntsman Hall Room 255 9:00-10:20 AM (690-401) and 10:30-11:50 AM (690-402)
OFFICE HOURS	3:45 pm – 4:45 pm on Thursdays
OFFICE LOCATION	Jon M. Huntsman Hall 566
CLASS EMAIL	oidd690@googlegroups.com
PREREQUISITES	No advanced mathematical training is required for this course, although having taken an introductory probability/statistics course may be useful.
TEACHING ASSISTANTS	MBA Students Jennifer Ji (jennyji@wharton.upenn.edu), Deivanai Chidambaram (deivanai@wharton.upenn.edu), and Anuj Khandelwal (akhand@wharton.upenn.edu); Ph.D. Candidates Edward Chang (changed@wharton.upenn.edu) and Erika Kirgios (ekirgios@wharton.upenn.edu)

1. Overview

1.1 Background

Over the last 40 years, psychologists and economists have joined forces to study how people process information and actually make decisions, rather than how they would make decisions if they were fully rational and selfish. This research program (dubbed 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 the students' intuitive empirical abilities but also by improving their understanding of project evaluation. 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. We will also touch upon ways to evaluate the effectiveness of new ideas in the workplace.

1.3 Who Should Not Take This Class

- If you are seeking a quantitative course about decision making, you may not like this class.
- If you can't stand psychology, you may not like this class.
- If you took many courses about social psychology as an undergraduate, you may find some course content redundant with your past training.
- This course is focused on managerial decision making rather than consumer decision making, but the two topics have considerable overlap since understanding consumers and colleagues often requires similar insights. If you have already taken a course on consumer behavior, please look closely at this syllabus to ensure that the topics covered in OIDD 690 will be new enough to you for this course to be a good use of your time.

1.4 Instruction Format

The course is primarily lecture based, although it includes some cases and activities. Class discussion is strongly encouraged.

2. Logistics

2.1 Readings

Two books are required for class:
    (1) Thaler, R.H. & Sunstein, C.R. (2008). Nudge: Improving Decisions about Health, Wealth, and Happiness. Yale University Press: New Haven, CT.
    (2) Cialdini, R.B. (1993). Influence: The Psychology of Persuasion. 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 Canvas 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	(18%)
(3) Class Participation	(20%)	(4) Final Group Project	(32%)

2.2.1 Midterm Exam (April 2nd)

The midterm will contain short-answer, essay and multiple choice questions and will take about an hour and fifteen minutes to complete. A sample midterm will be posted on Canvas.

2.2.2 Homework

Six homework assignments will be due throughout the term. Homework should be an individual exercise unless otherwise indicated. **Homework is always due by 9 am on the day of class**.

2.2.3 Class Participation

Students should come to class prepared to actively discuss the concepts in the readings. The 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). To contribute successfully to class discussion, attendance is of course necessary.

A subset of the questions that will be raised in class discussions will be posted along with reading assignments on Canvas. **Please prepare for each class by reading and considering these questions posted on Canvas carefully.**

Your contribution to our learning environment is more than just your participation in class discussion. Your active engagement in the various exercises we will conduct in class, helping one another with the course material, making suggestions about the course, etc. are all also critical aspects of your contribution to the learning environment. You have the option to participate in **Twitter** *(more on this later)* dialogues about our course, and being a thoughtful participant in this space is also a way to improve your class participation.

NOTE: Some people are uncomfortable with presenting viewpoints in a large group setting. However, contributing to discussions is an important part of your career development. I will cold call. If you are unprepared for class on a given day, please let me know in advance, and I will not call on you. If there is anything that may interfere with your ability to contribute on an ongoing basis, let's discuss it sooner rather than later. I am happy to work with you off-line to develop a strategy for deepening your comfort level and performance when it comes to class participation. If you are not sure where to start, please talk to me and we will figure out a plan together.

Students who miss fewer than four classes will receive double participation credit for all classes attended above and beyond this threshold (attendance is taken at the start of class). However, note that attendance is not required on February 7th (we will have optional in-class office hours that day), March 28th (we will hold a midterm review that day), or April 4th (we will have time for in-class group project work that day). In addition, missing class on January 17th, while discouraged, will not count towards a student's total days of miss class. I recognize that some shopping and settling in is happening on the first day of the term. That said, students who attend class on January 17th will earn participation credit, have their first pick of assigned seats for the rest of the semester and will get a "free pass" if they miss another day during the term (re my policy of double credit for classes attended over and above four total absences).

There is no need to notify anyone if you will miss a class or to explain your absence unless it is formally excused by the MBA program office. You are making cost-benefit tradeoffs, and I respect that!

Twitter

As an extension of our in-class learning experience, I will be tweeting throughout the course using the hashtag #OIDD690 and you are welcome, but not required, to participate as well. This is a particularly good space for sharing real world examples of the concepts we discuss in class. Because Twitter is not required in the course, you will not be held responsible for reading what is posted there, and you should not feel pressured to do so, but you are likely to learn more by following along. This is also an opportunity to enhance your contribution to the class participation portion of your grade.

Your tweets will be evaluated based on the extent to which your tweet is grounded in analysis or reflection. In other words, simply retweeting an article is perfectly fine and very much appreciated, but it will not boost your class participation as much as other forms of tweeting. For example, tell us how an article you are sharing parallels something we discussed in class or how it contradicts something we have learned or what tension it illustrates. Help us connect dots with your tweets.

Those of you who have a Twitter account, or are interested in making one for this class, are welcome to follow me (@Katy_Milkman) and to use the #OIDD690 hashtag when tweeting about topics related to this course. The class TA's are available for help and to answer any questions about making an account or using Twitter.

And for those of you who do not wish to get a Twitter account but who want to see what is going on, the easiest way to follow a hashtag without having an account is to use the Twitter search: https://twitter.com/search. You can type in a @person or #hashtag to see what is being tweeted. The only exception is if a user has marked his or her tweets (or profile) private, which might not show up in a public search. Also, you can always just Google a hashtag.

I am including a few relevant handles below, which you may find it interesting to follow. I have not screened these, but am including them because of their relevance to our class topics. If you find others that are relevant, please share them with all of us via Twitter.

Class-Related: https://twitter.com/katy_milkman/lists/behavioral-science

2.2.4 Final Group Project

Design an Intervention to Solve a Managerial Problem

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 managerial problem. Groups will develop a proposed behavioral intervention to solve a managerial problem at a particular organization and will develop an argument for why their proposal should be implemented by the organization in question. For example, a managerial problem of interest might be high rates of worker absenteeism in a specific US manufacturing facility. A behavioral intervention to address the problem might involve mailings to workers emphasizing low absenteeism rates among their peers. Your group would put together a compelling proposal designed to convince management at the manufacturing company that they should implement your intervention and detailing both how to deploy it and how to measure its effectiveness. Groups must research their managerial setting in detail, define the problem to be

addressed, describe their proposed intervention, provide a brief review of past research that gave rise to the proposed intervention, and describe the methods that are proposed for evaluating the effectiveness of the intervention.

• PRELIMINARY GROUP SELECTION (*March 14th*): Please plan to sign-up online with the group you plan to work with on your final project by March 14th.

• PROPOSAL (*Due April 5th*): Each group must submit a 1-page, single-spaced summary of their planned project. We will provide feedback on these project proposals. Prior to submitting this assignment each group should plan on communicating with the lead course TAs (Edward Chang and Erika Kirgios) over email or in person talk through ideas and choose the best one to work on.

• PRESENTATIONS (*April 23rd & 25th*): On these two days of class, each group will have between 5 and 15 minutes (depending on the final number of groups) to present their project to the class.

• PAPERS (*Due April 30th*): Each group must submit a 10 page, double-spaced paper providing a description of their project.

2.3 Class Policies

Laptops and Cell Phones: Laptops and cell phones are not permitted in class.

Absences: When you are absent, the class can't benefit from your comments and insights on the material, and this will of course hurt your class participation grade. If you are absent, you should arrange beforehand with a classmate to take notes and pick up any assignments or handouts.

Late Assignments: Late assignments will result in a grade deduction of 1 point per day. For example, a homework assignment worth 3 points out of your total course grade of 100 points could receive a maximum score of 2 points (instead of 3) if turned in one day late.

Late Arrivals: Please arrive on time to avoid disrupting the class.

Email Correspondence: Please direct all class-related emails to oidd690@googlegroups.com. In order to make sure that you get any information you need well before deadlines, please email at least *24 hours* before you need an answer on weekdays, and do not expect replies on weekends.

3. Course Outline

#	CLASS	TOPIC	ASSIGNMENT/ READINGS DUE
1	January 17th	Introduction	
2	January 22nd	Standard Economic Models of Decision Making and Experiments	**Reading:** Becker (1976); Levitt & Dubner (2005); Ayres (2007) **Due:** Homework #1
3	January 24th	Prospect Theory	**Reading:** Thaler & Sunstein (2008)
4	January 29th	Heuristics and Biases	**Reading:** Gladwell (2003); Gawande (1999)
5	January 31st	Fairness and Cooperation	**Reading:** Brafman and Brafman (2008)
6	February 5th	Fairness	**Reading:** The Kidney Case **Due:** Kidney Case votes (by 5 pm on 2/4) **Due:** Homework #2
7	February 7th	*Office Hours in Lieu of Class*	
8	February 12th	Social Norms and Conformity *(Guest Lecture: Scott Neuman, VP Global Ops & Marketing at Oracle Utilities (OPower))*	**Reading:** OPower Case
9	February 14th	Intertemporal Choice	**Listening:** Choiceology (2018) **Due:** Homework #3
10	February 19th	*Want/Should* Conflict and Commitment Devices	**Reading:** Green Bank of the Philippines Case
11	February 21st	Selling Commitment Devices *(Guest Lecture: Jordan Goldberg, Chairman of the Board of StickK)*	**Reading:** Fox (2012) **Prepare:** Visit and familiarize yourself with www.stickk.com **Due:** Homework #4
12	February 26th	Mental Accounting & Goal Setting	**Reading:** Lieber (2010)
13	February 28th	Follow-Through & Behavior Change for Good	**Reading:** Duhigg (2012); Evive Case
14	March 12th	Cognitive Dissonance, Confirmation Bias and Escalation of Commitment	**Reading:** Tavris and Aronson (2007)
15	March 14th	The Challenger Launch Decision	**Reading:** Challenger Case **Due:** List of final project group teammates
16	March 19th	Bounded Awareness	**Reading:** Gladwell (2009)
17	March 21st	Race and Gender Bias	**Reading:** Chugh (2018); Gender Diversity in the Boardroom Case **Due:** Homework #5
18	March 26th	Libertarian Paternalism and Choice Architecture	**Reading:** Thaler & Sunstein (2008) **Due:** Discussion sign-ups (by 3 pm on 3/25)
19	March 28th	Midterm Review	
20	April 2nd	Midterm Exam	
21	April 4th	*In Class Group Final Project Work*	**Due:** Final Project Proposal (by 5 pm on 4/5)
22	April 9th	Influence and Nudging in the Wild I *(Guest Lecture: Piyush Tantia, Chief Innovation Officer for ideas42)*	**Reading:** Cialdini (1993) **Prepare:** Visit and familiarize yourself with www.ideas42.org
23	April 11th	Influence and Nudging in the Wild II *(Guest Lecture: Mitesh Patel, Director of the Penn Medicine Nudge Unit)*	**Reading:** Cialdini (1993) **Prepare:** Visit and familiarize yourself with nudgeunit.upenn.edu **Due:** Homework #6 (by 9 am on 4/15)
24	April 16th	Influence and Nudging in the Wild III *(Guest Lecture: Duncan Gilchrist, Data Scientist at Uber)*	**Reading:** Cialdini (1993)
25	April 18th	Influence and Nudging in the Wild IV	**Reading:** Cialdini (1993)
26	April 23rd	Final Project Presentations	
27	April 25th	Final Project Presentations	
28	April 30th	Conclusion	**Due:** Final Project Paper

4. Reading Assignments

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

<u>Where to Find Readings</u>: (C) = Canvas, (S) = Study.net, and (B) = Book (<u>Nudge</u> or <u>Influence</u>)

<div align="center">

CLASS 1: INTRODUCTION
January 17th

</div>

No assigned reading

<div align="center">

CLASS 2: STANDARD ECONOMIC MODELS OF DECISION MAKING AND EXPERIMENTS
January 22nd

</div>

(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.*

(S) Ayres, I. (2007). <u>Super Crunchers</u>. Bantam Books: New York, NY. *Chapter 2: Creating Your Own Data with the Flip of a Coin.*

<div align="center">

CLASS 3: PROSPECT THEORY
January 24th

</div>

(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.*

<div align="center">

CLASS 4: HEURISTICS AND BIASES
January 29th

</div>

(S) Gladwell, M. (2003). "Connecting the Dots: The Paradoxes of Intelligence Reform," *The New Yorker*, March 10, 2003.

(S) Gawande, A. (1999). "The Cancer Cluster Myth." *The New Yorker*, February 8, 1999.

<div align="center">

CLASS 5: FAIRNESS AND COOPERATION
January 31st

</div>

(S) Brafman, O. & Brafman, R. (2008). <u>Sway: The Irresistible Pull of Irrational Behavior</u>. Broadway Books: New York, NY. *Chapter 6: In France, the Sun Revolves around the Earth.*

CLASS 6: FAIRNESS
February 5th

(S) Austin-Smith, D., Feddersen, Galinsky, A. & Liljenquist, K. (2010). The Kidney Case. Dispute Resolution Research Center, Northwestern University: Evanston, IL.

CLASS 7: OFFICE HOURS IN LIEU OF CLASS
February 7th

CLASS 8: SOCIAL NORMS AND CONFORMITY
February 12th

(S) Cuddy, A.C. & Doherty, K.T. (2010). OPOWER: Increasing Energy Efficiency through Normative Influence. Harvard Business School Press: Cambridge, MA.

CLASS 9: INTERTEMPORAL CHOICE
February 14th

(C) Milkman, K. L. (Host). (2018, November 12). *The Temptation of Now: With Guests Richard Thaler & Angela Duckworth* [Audio Podcast].

CLASS 10: SELLING COMMITMENT DEVICES
February 19th

(S) Ashraf, Nava, Dean Karlan, and Wesley Yin. Evaluating Microsavings Programs: Green Bank of the Philippines (A). Harvard Business School Publishing: Cambridge, MA.

CLASS 11: *WANT/SHOULD* CONFLICT AND COMMITMENT DEVICES
February 21st

(C) Fox, Emily Jane. (2012). "Dieting for Dollars." Philly.com, 18 January 2012.

Visit and familiarize yourself with www.stickk.com

CLASS 12: MENTAL ACCOUNTING & GOAL SETTING
February 26th

(C) Leiber, R. (2010). "Your Card Has Been Declined, Just as You Wanted." *New York Times,* August 13, 2010.

CLASS 13: FOLLOW-THROUGH & BEHAVIOR CHANGE FOR GOOD
February 28th

(S) Duhigg, C. (2012). The Power of Habit: Why We Do What We Do in Life and Business. Random House. *Chapter 2: The Craving Brain: How to Create New Habits.*

(S) Beshears, J. (2016). Evive Health and Workplace Influenza Vaccinations. Harvard Business School Press: Cambridge, MA.

CLASS 14: COGNITIVE DISSONANCE, CONFIRMATION BIAS AND ESCALATION OF COMMITMENT
March 12th

(S) Tavris, C. and Aronson, E. (2007). Mistakes Were Made (but not by me): Why We Justify Foolish Beliefs, Bad Decisions, and Hurtful Acts. Harcourt Books: USA. *Introduction & Chapter 1*.

CLASS 15: THE CHALLENGER LAUNCH DECISION
March 14th

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

CLASS 16: BOUNDED AWARENESS
March 19th

(S) Gladwell, M. (2009). "Cocksure: Banks, Battles, and the Psychology of Overconfidence." *The New Yorker*. July 27, 2009.

CLASS 17: RACE AND GENDER BIAS
March 21st

(S) Chugh, D. (2018). The Person You Mean to Be: How Good People Fight Bias. Harper Collins Publishing: New York, NY. *Chapter 4: Knowing It When You Don't See It.*

(S) Beshears, J., Iris Bohnet, and Jenny Sanford (2017). Increasing Gender Diversity in the Boardroom: The United Kingdom in 2011. Harvard Business School Press: Cambridge, MA.

CLASS 18: LIBERTARIAN PATERNALISM AND CHOICE ARCHITECTURE
March 26th

(B) Thaler, R.H. & Sunstein, C.R. (2008). Nudge: Improving Decisions about Health, Wealth, and Happiness. Yale University Press: New Haven, CT. *Introduction, Chapter 4: When Do We Need a Nudge?, Chapter 5: Choice Architecture, & Chapter 17: Objections.*

CLASS 19: MIDTERM REVIEW
March 28th

No reading assigned.

CLASS 20: MIDTERM EXAM
April 2nd

No reading assigned.

CLASS 21: IN-CLASS GROUP FINAL PROJECT PREPARATION
April 4th

No reading assigned.

CLASS 22: INFLUENCE AND NUDGING IN THE WILD I
April 9th

(B) Cialdini, R. (1993). Influence: The Psychology of Persuasion. Harper Collins Publishing: New York, NY. *Begin reading*.

Visit and familiarize yourself with www.ideas42.org

CLASS 23: INFLUENCE AND NUDGING IN THE WILD II
April 11th

(B) Cialdini, R. (1993). Influence: The Psychology of Persuasion. Harper Collins Publishing: New York, NY. *Continue reading*.

Visit and familiarize yourself with nudgeunit.upenn.edu

CLASS 24: INFLUENCE AND NUDGING IN THE WILD III
April 16th

(B) Cialdini, R. (1993). Influence: The Psychology of Persuasion. Harper Collins Publishing: New York, NY. *Continue reading.*

CLASS 25: INFLUENCE AND NUDGING IN THE WILD IV
April 18th

(B) Cialdini, R. (1993). Influence: The Psychology of Persuasion. Harper Collins Publishing: New York, NY. *Finish reading.*

CLASS 26: FINAL PROJECT PRESENTATIONS
April 23rd

No reading assigned.

CLASS 27: FINAL PROJECT PRESENTATIONS
April 25th

No reading assigned.

CLASS 28: CONCLUSION
April 30th

No reading assigned.

5. Additional Reading on Selected Course Topics

Note that much of the material from these readings will be covered during class. These readings may be helpful if you would like a refresher on a given lecture topic. However, they are not required and are likely to be most useful after attending a lecture on a given topic rather than before.

PROSPECT THEORY

Thaler, R.H. (1992). The Winner's Curse: Paradoxes and Anomalies of Economic Life. Princeton University Press: Princeton, NJ. *Chapter 6: The Endowment Effect, Loss Aversion, and Status Quo Bias.*

Camerer, Colin F. (2000). "Prospect Theory in the Wild: Evidence from the Field." In D. Kahneman and A. Tversky (eds.), Choices, Values, and Frames. Cambridge University Press: Cambridge, UK.

HEURISTICS AND BIASES

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

FAIRNESS AND COOPERATION

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.

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

SOCIAL NORMS

Thaler, R.H. & Sunstein, C.R. (2008). Nudge: Improving Decisions about Health, Wealth, and Happiness. Yale University Press: New Haven, CT. *Chapter 3: Following the Herd.*

INTERTEMPORAL CHOICE AND WANT/SHOULD CONFLICT

Thaler, R.H. (1992). The Winner's Curse: Paradoxes and Anomalies of Economic Life. Princeton University Press: Princeton, NJ. *Chapter 8: Intertemporal Choice.*

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.

COMMITMENT DEVICES AND MENTAL ACCOUNTING

Thaler, R.H. & Sunstein, C.R. (2008). Nudge: Improving Decisions about Health, Wealth, and Happiness. Yale University Press: New Haven, CT. *Chapter 2: Resisting Temptation*

BOUNDED AWARENESS, OVERCONFIDENCE, AND BOUNDED ETHICALITY

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

Bazerman, M., & Chugh, D. (2006). Decisions without Blinders, *Harvard Business Review.* January 2006*.*

Banaji, M., Bazerman, M., & Chugh, D. (2003). How (Un)Ethical Are You? *Harvard Business Review*, 81(12), 56-64.

FORECASTING

Tetlock, P.E., Mellers, B.A. (2011). Intelligent Management of Intelligence Agencies: Beyond Accountability Ping-Pong. *American Psychologist*, 66(6), 542-554.

CONCLUSION

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

Soll, J.B., Milkman, K.L. , & Payne, J.W. (2015). "A User's Guide to Debiasing." In K. Gideon and G. Wu (eds.) <u>Wiley-Blackwell Handbook of Judgment and Decision Making</u>.

Soll, J.B., K.L. Milkman, and J.W. Payne (2015). "Outsmart Your Own Biases." *Harvard Business Review*. (May)