

Course Syllabus

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| INSTRUCTOR | Professor Katy Milkman |
| CLASS MEETINGS | Tuesdays and Thursdays in JMHH 270 8:30-10:00 AM (690-401) and 10:15-11:45 AM (690-402) |
| OFFICE HOURS | By appointment (arranged with the TA team via an email to: oidd690@googlegroups.com) |
| 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 | Lead TAs: PhD Candidate Aneesh Rai (aneeshr@wharton.upenn.edu) PhD Candidate Katie Mehr (kmehr@wharton.upenn.edu) Grading TAs: Hunter Dong (hunterbd@wharton.upenn.edu) Arnav Gupta (arnavgu@wharton.upenn.edu) Olivia Hamel (ohamel@wharton.upenn.edu) Courtney Elliott McNevin (courte@wharton.upenn.edu) |

1. Overview

1.1 Background

Over the last 50 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 and Listening

One book is required for class:

- Thaler, R.H. & Sunstein, C.R. (2021). Nudge: The Final Edition. Yale University Press: New Haven, CT.

This book is available for purchase at all major online retailers. It is a popular press book rather than a textbook.

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). You will also have some assigned podcast listening that will be posted on Canvas.

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 In Person Midterm Exam (March 30th)

The midterm will contain short-answer, essay and multiple-choice questions and will take about an hour and fifteen minutes to complete in class. 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 8:30 am on the day of class unless otherwise noted on the syllabus or Canvas.**

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. I'll track attendance manually at the start of each class, so please arrive on time.

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.

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 offline 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.

Small Group Meetings with Me

Based on the success of getting to know my students in small groups during Zoom office hours during the pandemic, I'm requiring that everyone in this class join me for a 15-minute Zoom meeting at some point in the semester to chat about the course, life, career aspirations, etc. It will just be a chance to get to know one another and ask questions in a more intimate setting than our usual large classroom. I will welcome 4-5 students to these meetings at a time. You will have an opportunity to choose a time slot that is convenient for you on Canvas and will receive more information about how to sign up on Canvas.

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.

- **GROUP SELECTION** (*March 14th*): Please plan to sign-up on Canvas with the group you plan to work with on your final project by March 14th.
- **PROPOSAL** (*Due March 24th*): Each group must submit a 1-page, single-spaced summary of their planned project. Feedback will be provided on these project proposals, but they will not be graded. Prior to submitting this assignment each group should plan on contacting a course TA to share several ideas and get feedback on the best one to pursue.
- **PRESENTATION SLIDES** (*Due April 12th*): Each group must submit the slides that will be used for their final presentation on Canvas by 3PM on April 12th.
- **PRESENTATIONS** (*April 13th & 18th*): On these two days of class, each group will have between 5 and 10 minutes (depending on the final number of groups) to present their project to the class.
- **PAPERS** (*Due April 20th*): Each group must submit an 8-page, double-spaced paper providing a description of their project.

2.3 Class Policies

Absences: Absences for reasons beside illness hurt your class participation grade. If you have an emergency and need to miss a class, please:

- Submit an absence request via Canvas (see <https://support.wharton.upenn.edu/help/wharton-attendance-absence-and-video-requests-module-for-students> for more information; follow the instructions listed under ‘To Submit an Absence Request’ and ‘To Submit a Video Request’).
- Submit a 100-word essay with observations/questions that you would have liked to raise had you been there **within 24 hours of the class you missed** to oidd690@googlegroups.com w/ subject line “[FirstName LastName DateOfClassMissed Makeup Essay]”.
- You may use this option **once** this semester for an absence that isn't due to illness without any impact on your participation grade. If you are ill, please also follow this procedure.
- After you submit your 100-word essay, you will be granted access to the recording of the class you missed. You will have 1 week from the date of the missed class to access the recording on Canvas (after that week, your access to the recording will expire).

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.

Switching Sections: You should stay in your assigned section as this helps build community within the class and is easier for grading. It's possible that you can attend another session once or twice during the semester if you have a scheduling issue, but it shouldn't happen frequently. If you do plan to attend another session, please email oidd690@googlegroups.com in advance.

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 17 th | Introduction | |
| 2 | January 19 th | Standard Economic Models of Decision Making and Experiments | Reading: Becker (1976); Levitt & Dubner (2005); Ayres (2007) Listening: Choiceology (2022) Due: Homework #1 |
| 3 | January 24 th | Prospect Theory | Reading: Johnson (2021) Listening: Choiceology (2019) |
| 4 | January 26 th | Heuristics and Biases | Reading: Gladwell (2003); Gawande (1999); Gounder (2023) |
| 5 | January 31 st | Procedural Justice | Reading: The Kidney Case Due: Kidney Case votes (by 5 pm on 1/30) Due: Homework #2 |
| 6 | February 2 nd | Fairness and Cooperation | Reading: Brafman and Brafman (2008); Thaler (2020) |
| 7 | February 7 th | Social Norms and Conformity <i>(Guest Lecture: Paul McDonald, Senior Director of OPower Product Strategy & Marketing)</i> | Reading: OPower Case Due: Homework #3 |
| 8 | February 9 th | Intertemporal Choice | Reading: Thaler and Sunstein (2021) |
| 9 | February 14 th | <i>Want/Should Conflict and Commitment Devices (Guest Lecture: Jordan Goldberg, Chairman of the Board of StickK)</i> | Reading: Green Bank of the Philippines Case; Fox (2012) Prepare: Visit and familiarize yourself with www.stickk.com Due: Homework #4 |
| 10 | February 16 th | Mental Accounting & Goal Setting | Reading: Lieber (2010) Listening: Choiceology (2019) |
| 11 | February 21 st | Follow-Through & Behavior Change for Good | Reading: Milkman (2021); Duhigg (2012) |
| 12 | February 23 rd | Cognitive Dissonance, Confirmation Bias and Escalation of Commitment | Reading: Tavis and Aronson (2007) Listening: Next Big Idea Club (2022) |
| 13 | March 14 th | The Challenger Launch Decision | Reading: Challenger Case Due: List of final project group teammates |
| 14 | March 16 th | Bounded Awareness | Reading: Gladwell (2009) Due: Homework #5 |
| 15 | March 21 st | Libertarian Paternalism and Choice Architecture | Reading: Thaler & Sunstein (2021) Due: Discussion sign-ups (by 3 pm on 3/20) |
| 16 | March 23 rd | Race and Gender Bias | Reading: Chugh (2018); Gender Diversity in the Boardroom Case Due: Final Project Proposal (by 5 pm on 3/24) |
| 17 | March 28 th | Midterm Review (Optional) | |
| 18 | March 30 th | Midterm Exam in Person During Class | Prepare: Bring a calculator to class |
| 19 | April 4 th | Influence and Nudging in the Wild I <i>(Guest Lecture: Jennifer Kurkoski, Director of People Analytics at Google)</i> | Reading: Cialdini (2001) Prepare: Visit and familiarize yourself with bit.ly/3GaHNvb |
| 20 | April 6 th | Influence and Nudging in the Wild II <i>(Guest Lecture: John List, Chief Economist at Walmart)</i> | Reading: List (2022) Listening: Freakonomics (2022) |
| 21 | April 11 th | Influence and Nudging in the Wild III <i>(Guest Lecture: Piyush Tantia, Chief Innovation Officer at ideas42)</i> | Prepare: Visit and familiarize yourself with www.ideas42.org Due: Homework #6 |
| 22 | April 13 th | Final Project Presentations | Due: Final Project Presentation Slides (by 3 pm on 4/12) |
| 23 | April 18 th | Final Project Presentations | |
| 24 | April 20 th | Conclusion | Due: Final 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.

Where to Find Readings: (C) = Canvas, (S) = Study.net, and (B) = Book (Nudge)

CLASS 1: INTRODUCTION

January 17th

No assigned reading

CLASS 2: STANDARD ECONOMIC MODELS OF DECISION MAKING AND EXPERIMENTS

January 19th

(S) Becker, G. (1976). The Economic Approach to Human Behavior. Chicago: University of Chicago Press. *Introduction*.

(S) Levitt, S.D. & Dubner, S.J.(2005). Freakonomics: A Rogue Economist Explores the Hidden Side of Everything. Harper Perrenial: New York. *Introduction*.

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

(C) Milkman, K. L. (Host). *Choiceology* (2022, November 7). *Mesmerized: With Guest John List* [Audio Podcast].

CLASS 3: PROSPECT THEORY

January 24th

(S) Johnson, E.J. (2021). The Elements of Choice: Why the Way We Decide Matters. Riverhead Books: New York, NY. *Chapter 5: Decisions by Default - Pages 107-122*.

(C) Milkman, K. L. (Host). *Choiceology* (2019, October 21). *Take the Deal: With Guest Daniel Kahneman* [Audio Podcast].

CLASS 4: HEURISTICS AND BIASES

January 26th

(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.

(S) Gounder, C. (2023). "Grant Wahl Was a Loving Husband. I Will Always Protect His Legacy." *The New York Times*, January 8, 2023.

CLASS 5: PROCEDURAL JUSTICE*January 31st*

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

CLASS 6: FAIRNESS AND COOPERATION*February 2nd*

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

(S) Thaler, R. (2020). "The Law of Supply and Demand Isn't Fair." *The New York Times*, May 20, 2020.

CLASS 7: SOCIAL NORMS AND CONFORMITY*February 7th*

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

CLASS 8: INTERTEMPORAL CHOICE*February 9th*

(B) Thaler, R.H. & Sunstein, C.R. (2021). Nudge: The Final Edition. Yale University Press: New Haven, CT. *Chapter 14: Saving the Planet.*

CLASS 9: WANT/SHOULD CONFLICT AND COMMITMENT DEVICES*February 14th*

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

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

Visit and familiarize yourself with www.stickk.com

CLASS 10: MENTAL ACCOUNTING & GOAL SETTING*February 16th*

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

(C) Milkman, K.L. (Host). *Choiceology* (2019, January 7). *A Clean Slate: With Guests John Beshears, Richard Thaler & Ray Zahab* [Audio Podcast]

CLASS 11: FOLLOW-THROUGH & BEHAVIOR CHANGE FOR GOOD*February 21st*

(S) Milkman, K. (2021). How to Change: The Science of Getting from Where You Are to Where You Want to Be. Portfolio: New York, NY. *Chapter 4: Forgetfulness*.

(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*.

CLASS 12: COGNITIVE DISSONANCE, CONFIRMATION BIAS AND ESCALATION OF COMMITMENT*February 23rd*

(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*.

(C) Griscom, Rufus. (Host). *The Next Big Idea* (2022, October 6). *Quit: Why You Have to Give Up if You Want to Get Ahead: With Guest Annie Duke* [Audio Podcast]

CLASS 13: 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 14: BOUNDED AWARENESS*March 16th*

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

CLASS 15: LIBERTARIAN PATERNALISM AND CHOICE ARCHITECTURE*March 21st*

(B) Thaler, R.H. & Sunstein, C.R. (2021). Nudge: The Final Edition. Yale University Press: New Haven, CT. *Introduction, Chapter 4: When Do We Need a Nudge?, Chapter 5: Choice Architecture, & Chapter 15: Much Ado About Nudging*.

CLASS 16: RACE AND GENDER BIAS*March 23rd*

(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 17: MIDTERM REVIEW*March 28th*

No reading assigned.

CLASS 18: MIDTERM EXAM IN CLASS*March 30th*

No reading assigned. Bring a calculator to class.

CLASS 19: INFLUENCE AND NUDGING IN THE WILD I*April 4th*

(S) Cialdini, R. (2001). [Harnessing the Science of Persuasion](https://hbr.org/2001/10/harnessing-the-science-of-persuasion). Harvard Business Review.
<https://hbr.org/2001/10/harnessing-the-science-of-persuasion>

Visit and familiarize yourself with bit.ly/3GaHNvb**CLASS 20: INFLUENCE AND NUDGING IN THE WILD II***April 6th*

(S) List, J. (2022). [The Voltage Effect: How to Make Good Ideas Great and Great Ideas Scale](#).
Currency: New York, NY. *Chapter 1: Dupers and False Positives*.

(C) Dubner, Stephen. (Host). *Freakonomics Radio* (2022, February 23). *Why Do Most Ideas Fail to Scale: With Guest John List* [Audio Podcast]

CLASS 21: INFLUENCE AND NUDGING IN THE WILD III*April 11th*Visit and familiarize yourself with www.ideas42.org**CLASS 22: FINAL PROJECT PRESENTATIONS***April 13th*

No reading assigned.

CLASS 23: FINAL PROJECT PRESENTATIONS*April 18th*

No reading assigned.

CLASS 24: CONCLUSION*April 20th*

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. (2021). Nudge: The Final Edition. Yale University Press: New Haven, CT. *Chapter 3: Following the Herd*.

Milkman, K.L. (2021). How to Change: The Science of Getting from Where You Are to Where You Want to Be. Portfolio / Penguin: New York, NY. *Chapter 7: Conformity*.

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. (2021). Nudge: The Final Edition. Yale University Press: New Haven, CT. *Chapter 2: Resisting Temptation*.

Milkman, K.L. (2021). How to Change: The Science of Getting from Where You Are to Where You Want to Be. Portfolio / Penguin: New York, NY. *Chapter 3: Procrastination*.

BOUNDED AWARENESS, OVERCONFIDENCE, AND BOUNDED ETHICALITY

Russo, E.J. & Shoemaker, P.J.H. (2002). Winning Decisions: Getting it Right the First Time. 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.

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.) Wiley-Blackwell Handbook of Judgment and Decision Making.

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