**Course Syllabus**

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| INSTRUCTOR | Professor Katy Milkman |
| CLASS MEETINGS | Tuesdays and Thursdays8:30-10:00 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:**Alekhya Audi (aaudi@wharton.upenn.edu)Samantha Schiff (sschiff@wharton.upenn.edu)Colin Shaw (ccshaw@wharton.upenn.edu)Justin Wong (jwong94@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. **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**

* 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 31st)*

The midterm will contain short-answer, essay and multiple-choice questions and will take about an hour and fifteen minutes to complete on Canvas during a synchronous class session. 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.

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 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 four 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.

**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 use Twitter, 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 have included a few relevant handles in a Twitter list (see 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.

• GROUP SELECTION (*March 15th*): Please plan to sign-up on Canvas with the group you plan to work with on your final project by March 15th.

• PROPOSAL (*Due March 25th*): 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 13th*): Each group must submit the slides that will be used for their final presentation on Canvas by 3PM on April 13th.

• PRESENTATIONS (*April 14th & 19th*): 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 21st*): Each group must submit an 8-page, double-spaced paper providing a description of their project.

**2.3 Class Policies**

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

* 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 **no more than 2 times** this semester.

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 shouldn't be more than that. 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**

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| **#** | **CLASS** | **TOPIC** | **ASSIGNMENT/ READINGS DUE** |
| 1 | January 18th  | Introduction |  |
| 2 | January 20th  | Standard Economic Models of Decision Making and Experiments | **Reading:** Becker (1976); Levitt & Dubner (2005); Ayres (2007)**Due:** Homework #1 |
| 3 | January 25th  | Prospect Theory | **Reading:** Johnson (2021)**Listening:** Choiceology (2019) |
| 4 | January 27th  | Heuristics and Biases | **Reading:** Gladwell (2003); Gawande (1999) |
| 5 | February 1st | Fairness and Cooperation | **Reading:** Brafman and Brafman (2008); Thaler (2020)**Due:** Homework #2 |
| 6 | February 3rd | Social Norms and Conformity *(Guest Lecture: Paul McDonald, Senior Director of OPower Product Strategy & Marketing)* | **Reading:** OPower Case |
| 7 | February 8th  | Procedural Justice | **Reading:** The Kidney Case**Due:** Kidney Case votes (by 5 pm on 2/7) |
| 8 | February 10th  | Intertemporal Choice | **Listening:** Choiceology (2018)**Due:** Homework #3 |
| 9 | February 15th  | *Want*/*Should* Conflict and Commitment Devices *(Guest Lecture: Jordan Goldberg, Chairman of the Board of StickK)* | **Reading:** Green Bank of the Philippines Case; Fox (2012)**Prepare:** Visit and familiarize yourself with [www.stickk.com](http://www.stickk.com)**Due:** Homework #4 |
| 10 | February 17th  | Mental Accounting & Goal Setting | **Reading:** Lieber (2010) **Listening:** Choiceology (2019) |
| 11 | February 22nd  | Follow-Through & Behavior Change for Good | **Reading:** Milkman (2021); Duhigg (2012) |
| 12 | February 24th  | Cognitive Dissonance, Confirmation Bias and Escalation of Commitment  | **Reading:** Tavris and Aronson (2007) |
| 13 | March 15th | The Challenger Launch Decision | **Reading:** Challenger Case**Due:** List of final project group teammates |
| 14 | March 17th  | Bounded Awareness | **Reading:** Gladwell (2009)**Due:** Homework #5  |
| 15 | March 22nd  | Libertarian Paternalism and Choice Architecture | **Reading:** Thaler & Sunstein (2021)**Due:** Discussion sign-ups (by 3 pm on 3/21) |
| 16 | March 24th  | Race and Gender Bias | **Reading:** Chugh (2018); Gender Diversity in the Boardroom Case**Due**: Final Project Proposal (by 5 pm on 3/25) |
| 17 | March 29th  | Midterm Review (Optional) |  |
| 18 | March 31st  | Midterm Exam on Canvas During Class | **Prepare:** Bring your laptop to class |
| 19 | April 5th  | Influence and Nudging in the Wild I *(Guest Lecture: Jana Smith, Managing Director at Ideas42)* | **Reading:** Cialdini (2001)**Prepare:** Visit and familiarize yourself with [www.ideas42.org](http://www.ideas42.org) |
| 20 | April 7th  | Influence and Nudging in the Wild II (*Guest Lecture: Jessie Wisdom, Co-Founder of Humu*) | **Prepare:** Visit and familiarize yourself with [www.humu.com](http://www.humu.com)  |
| 21 | April 12th  | Influence and Nudging in the Wild III (*Guest Lecture: Mitesh Patel, National Lead of Behavioral Insights at Ascension*) | **Listening:** Freakonomics (2019)**Due:** Homework #6 |
| 22 | April 14th  | Final Project Presentations  | **Due:** Final Project Presentation Slides (by 3 pm on 4/13) |
| 23 | April 19th  | Final Project Presentations  |  |
| 24 | April 21st  | 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 18th*

No assigned reading

**CLASS 2: STANDARD ECONOMIC MODELS OF DECISION MAKING AND EXPERIMENTS**

*January 20th*

(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.*

**CLASS 3: PrOSPECT THEORY**

*January 25th*

(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). (2019, October 21). *Take the Deal: With Guest Daniel Kahneman* [Audio Podcast].

**CLASS 4: Heuristics and Biases**

*January 27th*

(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.

**CLASS 5: FAIRNESS AND COOPERATION**

*February 1st*

(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 6: Social Norms AND Conformity**

*February 3rd*

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

**CLASS 7: PROCEDURAL JUSTICE**

*February 8th*

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

**CLASS 8: Intertemporal Choice**

*February 10th*

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

**CLASS 9: *Want/Should* Conflict AND COMMITMENT DEVICES**

*February 15th*

(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 17th*

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

(C) Milkman, K.L. (Host). (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 22nd*

(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 24th*

(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 13: The Challenger Launch Decision**

*March 15th*

(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 17th*

(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 22nd*

(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 24th*

(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 29th*

No reading assigned.

**CLASS 18: Midterm Exam on canvas**

*March 31st*

No reading assigned.

**Class 19: Influence and Nudging in the Wild I**

*April 5th*

Visit and familiarize yourself with www.ideas42.org

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

**CLASS 20: Influence and Nudging in the Wild II**

*April 7th*

Visit and familiarize yourself with www.humu.com

**CLASS 21: Influence and Nudging in the Wild III**

*April 12th*

(C) Dubner, S. (Host). (2019, November 13). *How to Save $32 Million in One Hour* [Audio Podcast].

**CLASS 22: Final Project Presentations**

*April 14th*

No reading assigned.

**CLASS 23: Final Project Presentations**

*April 19th*

No reading assigned.

**CLASS 24: Conclusion**

*April 21st*

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. & Shoemacker, 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)