## Course Syllabus

<table>
<thead>
<tr>
<th>INSTRUCTOR</th>
<th>Professor Katy Milkman</th>
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<tbody>
<tr>
<td>CLASS MEETINGS</td>
<td>Tuesdays and Thursdays, synchronous, interactive classes via Zoom 9:00-10:20 AM (690-401) and 10:30-11:50 AM (690-402)</td>
</tr>
<tr>
<td>OFFICE HOURS</td>
<td>By appointment (arranged with lead TA, Ph.D. Candidate Aneesh Rai <a href="mailto:aneeshr@wharton.upenn.edu">aneeshr@wharton.upenn.edu</a>)</td>
</tr>
<tr>
<td>CLASS EMAIL</td>
<td><a href="mailto:oidd690@googlegroups.com">oidd690@googlegroups.com</a></td>
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<tr>
<td>PREREQUISITES</td>
<td>No advanced mathematical training is required for this course, although having taken an introductory probability/statistics course may be useful.</td>
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</tbody>
</table>
| TEACHING ASSISTANTS | **Lead TA:** Aneesh Rai ([aneeshr@wharton.upenn.edu](mailto:aneeshr@wharton.upenn.edu))  
**Classroom Support TAs:** Jason Chen ([chenjd@wharton.upenn.edu](mailto:chenjd@wharton.upenn.edu))  
Rachel Weil ([rweil@wharton.upenn.edu](mailto:rweil@wharton.upenn.edu))  
**Grading TAs:** Oyinda Adefioye ([oyinda@wharton.upenn.edu](mailto:oyinda@wharton.upenn.edu))  
Ria Joneja ([rjoneja@wharton.upenn.edu](mailto:rjoneja@wharton.upenn.edu))  
Melissa Ross ([rossme@wharton.upenn.edu](mailto:rossme@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

Two books are required for class:


Both are available for purchase at all major online retailers. 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 (March 30th)

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 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.

**Small Group Meetings with Me**

Because we aren’t meeting in person this year, it’s important to me to find new ways to connect. To that end, 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 Zoom classroom. I will welcome three 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 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.

• GROUP SELECTION (March 9th): Please plan to sign-up on Canvas with the group you plan to work with on your final project by March 9th.

• PROPOSAL (Due April 7th): Each group must submit a 1-page, single-spaced summary of their planned project. I will provide feedback on these project proposals. Prior to submitting this assignment each group should plan on meeting with a course TA to talk through several ideas and choose the best one to work on.

• PRESENTATIONS (April 22nd & 27th): 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 29th): Each group must submit a 10-page, double-spaced paper providing a description of their project.

2.3 Class Policies

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.

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.
### Course Outline

<table>
<thead>
<tr>
<th>#</th>
<th>CLASS</th>
<th>TOPIC</th>
<th>ASSIGNMENT/ READING DUE</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan. 21st</td>
<td>Introduction</td>
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<td>2</td>
<td>Jan. 26th</td>
<td>Standard Economic Models of Decision Making and Experiments</td>
<td>Reading: Becker (1976); Levitt &amp; Dubner (2005); Ayres (2007) Due: Homework #1</td>
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<td>4</td>
<td>Feb. 2nd</td>
<td>Heuristics and Biases</td>
<td>Reading: Gladwell (2003); Gawande (1999)</td>
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<td>5</td>
<td>Feb. 4th</td>
<td>Fairness and Cooperation</td>
<td>Reading: Brafman and Brafman (2008); Thaler (2020)</td>
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<td>6</td>
<td>Feb. 9th</td>
<td>Fairness</td>
<td>Reading: The Kidney Case Due: Kidney Case votes (by 5 pm on 2/8)</td>
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<td>7</td>
<td>Feb. 11th</td>
<td>Social Norms and Conformity</td>
<td>Reading: OPower Case Due: Homework #2</td>
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<td>8</td>
<td>Feb. 16th</td>
<td>Intertemporal Choice</td>
<td>Listening: Choiceology (2018) Due: Homework #3</td>
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<td>9</td>
<td>Feb. 18th</td>
<td>Want/Should Conflict and Commitment Devices</td>
<td>Reading: Green Bank of the Philippines Case</td>
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<td>10</td>
<td>Feb. 23rd</td>
<td>Selling Commitment Devices</td>
<td>Reading: Fox (2012) Prepare: Visit and familiarize yourself with <a href="http://www.stickk.com">www.stickk.com</a> Due: Homework #4</td>
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<tr>
<td>11</td>
<td>Feb. 25th</td>
<td>Mental Accounting &amp; Goal Setting</td>
<td>Reading: Lieber (2010)</td>
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<td>12</td>
<td>Mar. 2nd</td>
<td>Follow-Through &amp; Behavior Change for Good</td>
<td>Reading: Duhigg (2012); Evive Case</td>
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<td>13</td>
<td>Mar. 4th</td>
<td>Cognitive Dissonance, Confirmation Bias and Escalation of Commitment</td>
<td>Reading: Tavris and Aronson (2007)</td>
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<td>14</td>
<td>Mar. 9th</td>
<td>The Challenger Launch Decision</td>
<td>Reading: Challenger Case Due: List of final project group teammates</td>
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<td>15</td>
<td>Mar. 16th</td>
<td>Bounded Awareness</td>
<td>Reading: Gladwell (2009)</td>
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<td>16</td>
<td>Mar. 18th</td>
<td>Race and Gender Bias</td>
<td>Reading: Chugh (2018); Gender Diversity in the Boardroom Case Due: Homework #5</td>
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<td>17</td>
<td>Mar. 23rd</td>
<td>Libertarian Paternalism and Choice Architecture</td>
<td>Reading: Thaler &amp; Sunstein (2008) Due: Discussion sign-ups (by 3 pm on 3/22)</td>
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<tr>
<td>18</td>
<td>Mar. 25th</td>
<td>Midterm Review (Optional)</td>
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<td>19</td>
<td>Mar. 30th</td>
<td>Midterm Exam on Canvas During Class</td>
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<td>20</td>
<td>Apr. 6th</td>
<td>Optional Class for Q&amp;A about Final Projects</td>
<td>Due: Final Project Proposal (by 5 pm on 4/7)</td>
</tr>
<tr>
<td>21</td>
<td>Apr. 8th</td>
<td>Influence and Nudging in the Wild I (Guest Lecture: Caribay Garcia, People Scientist at Humu)</td>
<td>Reading: Cialdini (1993)</td>
</tr>
<tr>
<td>22</td>
<td>Apr. 13th</td>
<td>Influence and Nudging in the Wild II (Guest Lecture: John List, Chief Economist at Lyft and Ian Muir, Director of Data at Lyft)</td>
<td>Reading: Cialdini (1993) Prepare: Visit and familiarize yourself with <a href="http://www.humu.com">www.humu.com</a></td>
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<tr>
<td>23</td>
<td>Apr. 15th</td>
<td>Influence and Nudging in the Wild III (Guest Lecture: Piyush Tantia, Chief Innovation Officer at ideas42 and Jessica Jean-Francois, Vice President at ideas42)</td>
<td>Reading: Cialdini (1993) Prepare: Visit and familiarize yourself with <a href="http://www.ideas42.org">www.ideas42.org</a></td>
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<tr>
<td>24</td>
<td>Apr. 20th</td>
<td>Influence and Nudging in the Wild IV</td>
<td>Reading: Cialdini (1993) Due: Homework #6</td>
</tr>
<tr>
<td>25</td>
<td>Apr. 22nd</td>
<td>Final Project Presentations</td>
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<tr>
<td>26</td>
<td>Apr. 27th</td>
<td>Final Project Presentations</td>
<td></td>
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<tr>
<td>27</td>
<td>Apr. 29th</td>
<td>Conclusion</td>
<td>Due: Final Project Paper</td>
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</tbody>
</table>
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 or Influence)

**CLASS 1: INTRODUCTION**
*January 21*th

No assigned reading

**CLASS 2: STANDARD ECONOMIC MODELS OF DECISION MAKING AND EXPERIMENTS**
*January 26*th


**CLASS 3: PROSPECT THEORY**
*January 28*th


**CLASS 4: HEURISTICS AND BIASES**
*February 2*nd


**CLASS 5: FAIRNESS AND COOPERATION**
*February 4*th


**CLASS 6: FAIRNESS**  
*February 9th*


**CLASS 7: SOCIAL NORMS AND CONFORMITY**  
*February 11th*


**CLASS 8: INTERTEMPORAL CHOICE**  
*February 16th*


**CLASS 9: WANT/ SHOULD CONFLICT AND COMMITMENT DEVICES**  
*February 18th*


Visit and familiarize yourself with [www.stickk.com](http://www.stickk.com)

**CLASS 10: SELLING COMMITMENT DEVICES**  
*February 23rd*


**CLASS 11: MENTAL ACCOUNTING & GOAL SETTING**  
*February 25th*


**CLASS 12: FOLLOW-THROUGH & BEHAVIOR CHANGE FOR GOOD**  
*March 2nd*


CLASS 13: COGNITIVE DISSONANCE, CONFIRMATION BIAS AND ESCALATION OF COMMITMENT
March 4th


CLASS 14: THE CHALLENGER LAUNCH DECISION
March 9th


CLASS 15: BOUNDED AWARENESS
March 16th


CLASS 16: RACE AND GENDER BIAS
March 18th


CLASS 17: LIBERTARIAN PATERNALISM AND CHOICE ARCHITECTURE
March 23rd


CLASS 18: MIDTERM REVIEW
March 25th

No reading assigned.

CLASS 19: MIDTERM EXAM ON CANVAS
March 30th

No reading assigned.
CLASS 20: OPTIONAL CLASS FOR Q&A ABOUT FINAL PROJECTS  
*April 6th*

No reading assigned.

CLASS 21: INFLUENCE AND NUDGING IN THE WILD I  
*April 8th*


CLASS 22: INFLUENCE AND NUDGING IN THE WILD II  
*April 13th*


Visit and familiarize yourself with [www.humu.com](http://www.humu.com)

CLASS 23: INFLUENCE AND NUDGING IN THE WILD III  
*April 15th*


Visit and familiarize yourself with [www.ideas42.org](http://www.ideas42.org)

CLASS 24: INFLUENCE AND NUDGING IN THE WILD IV  
*April 20th*


CLASS 25: FINAL PROJECT PRESENTATIONS  
*April 22nd*

No reading assigned.

CLASS 26: FINAL PROJECT PRESENTATIONS  
*April 27th*

No reading assigned.

CLASS 27: CONCLUSION  
*April 29th*

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


HEURISTICS AND BIASES


FAIRNESS AND COOPERATION


SOCIAL NORMS


INTERTEMPORAL CHOICE AND WANT/SHOULD CONFLICT


COMMITMENT DEVICES AND MENTAL ACCOUNTING

BOUNDED AWARENESS, OVERCONFIDENCE, AND BOUNDED ETHICALITY


FORECASTING


CONCLUSION

