Course Syllabus

INSTRUCTOR  Professor Katy Milkman

CLASS MEETINGS  Tuesdays and Thursdays
   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:
   Courtney Elliott (courte@wharton.upenn.edu)
   Arnav Gupta (arnavgu@wharton.upenn.edu)
   Hunter Dong (hunterbd@wharton.upenn.edu)
   Olivia Hamel (ohamel@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:

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:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Midterm Exam</td>
<td>(30%)</td>
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<tr>
<td>(2) Homework</td>
<td>(18%)</td>
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<tr>
<td>(3) Class Participation</td>
<td>(20%)</td>
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<tr>
<td>(4) Final Group Project</td>
<td>(32%)</td>
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</tbody>
</table>

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 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.

**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.

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 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 once 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

<table>
<thead>
<tr>
<th>#</th>
<th>CLASS</th>
<th>TOPIC</th>
<th>ASSIGNMENT/ READINGS DUE</th>
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<tbody>
<tr>
<td>1</td>
<td>January 17th</td>
<td>Introduction</td>
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<tr>
<td>2</td>
<td>January 19th</td>
<td>Standard Economic Models of Decision Making and Experiments</td>
<td>Reading: Becker (1976); Levitt &amp; Dubner (2005); Ayres (2007)</td>
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<td>Due: Homework #1</td>
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<td>3</td>
<td>January 24th</td>
<td>Prospect Theory</td>
<td>Reading: Johnson (2021)</td>
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<td>Listening: Choiceology (2019)</td>
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<td>4</td>
<td>January 26th</td>
<td>Heuristics and Biases</td>
<td>Reading: Gladwell (2003); Gawande (1999)</td>
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<td>5</td>
<td>January 31st</td>
<td>Fairness and Cooperation</td>
<td>Reading: Brafman and Brafman (2008); Thaler (2020)</td>
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<td>Due: Homework #2</td>
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<td>6</td>
<td>February 2nd</td>
<td>Procedural Justice</td>
<td>Reading: The Kidney Case</td>
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<td>Due: Kidney Case votes (by 5 pm on 2/1)</td>
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<td>7</td>
<td>February 7th</td>
<td>Social Norms and Conformity (Guest Lecture: Paul McDonald, Senior Director of OPower Product Strategy &amp; Marketing)</td>
<td>Reading: OPower Case</td>
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<td>8</td>
<td>February 9th</td>
<td>Intertemporal Choice</td>
<td>Listening: Choiceology (2018)</td>
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<td>Due: Homework #3</td>
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<td>9</td>
<td>February 14th</td>
<td>Want/Should Conflict and Commitment Devices (Guest Lecture: Jordan Goldberg, Chairman of the Board of StickK)</td>
<td>Reading: Green Bank of the Philippines Case; Fox (2012)</td>
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<td></td>
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<td></td>
<td>Prepare: Visit and familiarize yourself with <a href="http://www.stickk.com">www.stickk.com</a></td>
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<td>Due: Homework #4</td>
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<td>10</td>
<td>February 16th</td>
<td>Mental Accounting &amp; Goal Setting</td>
<td>Reading: Lieber (2010)</td>
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<td>Listening: Choiceology (2019)</td>
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<td>11</td>
<td>February 21st</td>
<td>Follow-Through &amp; Behavior Change for Good</td>
<td>Reading: Milkman (2021); Duhigg (2012)</td>
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<td>12</td>
<td>February 23rd</td>
<td>Cognitive Dissonance, Confirmation Bias and Escalation of Commitment</td>
<td>Reading: Tavris and Aronson (2007)</td>
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<td>13</td>
<td>March 14th</td>
<td>The Challenger Launch Decision</td>
<td>Reading: Challenger Case</td>
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<td>Due: List of final project group teammates</td>
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<td>14</td>
<td>March 16th</td>
<td>Bounded Awareness</td>
<td>Reading: Gladwell (2009)</td>
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<td>Due: Homework #5</td>
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<td>15</td>
<td>March 21st</td>
<td>Libertarian Paternalism and Choice Architecture</td>
<td>Reading: Thaler &amp; Sunstein (2021)</td>
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<td>Due: Discussion sign-ups (by 3 pm on 3/20)</td>
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<td>16</td>
<td>March 23rd</td>
<td>Race and Gender Bias</td>
<td>Reading: Chugh (2018); Gender Diversity in the Boardroom Case</td>
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<td>Due: Final Project Proposal (by 5 pm on 3/24)</td>
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<td>17</td>
<td>March 28th</td>
<td>Midterm Review (Optional)</td>
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<td>18</td>
<td>March 30th</td>
<td>Midterm Exam Online In Person During Class</td>
<td>Prepare: Bring your laptop to class</td>
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<td>19</td>
<td>April 4th</td>
<td>Influence and Nudging in the Wild I (Guest Lecture: TBA)</td>
<td>Reading: Cialdini (2001)</td>
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<td>20</td>
<td>April 6th</td>
<td>Influence and Nudging in the Wild II (Guest Lecture: TBA)</td>
<td>Reading: TBA</td>
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<td>21</td>
<td>April 11th</td>
<td>Influence and Nudging in the Wild III (Guest Lecture: TBA)</td>
<td>Reading: TBA</td>
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<td>Due: Homework #6</td>
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<tr>
<td>22</td>
<td>April 13th</td>
<td>Final Project Presentations</td>
<td>Due: Final Project Presentation Slides (by 3 pm on 4/12)</td>
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<tr>
<td>23</td>
<td>April 18th</td>
<td>Final Project Presentations</td>
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<tr>
<td>24</td>
<td>April 20th</td>
<td>Conclusion</td>
<td>Due: Final Paper</td>
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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


CLASS 3: PROSPECT THEORY
   January 24th


CLASS 4: HEURISTICS AND BIASES
   January 26th


CLASS 5: FAIRNESS AND COOPERATION
   January 31st


**CLASS 6: PROCEDURAL JUSTICE**  
*February 2nd*


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


**CLASS 8: INTERTEMPORAL CHOICE**  
*February 9th*


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


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

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


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


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


**CLASS 13: THE CHALLENGER LAUNCH DECISION**  
*March 14th*


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


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


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


**CLASS 17: MIDTERM REVIEW**  
*March 28th*

No reading assigned.

**CLASS 18: MIDTERM EXAM ON CANVAS**  
*March 30th*

No reading assigned.
CLASS 19: INFLUENCE AND NUDGING IN THE WILD I
April 4th


CLASS 20: INFLUENCE AND NUDGING IN THE WILD II
April 6th

TBA

CLASS 21: INFLUENCE AND NUDGING IN THE WILD III
April 11th

TBA

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


HEURISTICS AND BIASES
*Chapter 2: Common Biases (Pages 13-33, skip Q12).*

**FAIRNESS AND COOPERATION**


**SOCIAL NORMS**


**INTERTEMPORAL CHOICE AND WANT/SHOULD CONFLICT**


**COMMITMENT DEVICES AND MENTAL ACCOUNTING**


**BOUNDED AWARENESS, OVERCONFIDENCE, AND BOUNDED ETHICALITY**


**CONCLUSION**
