Course Syllabus

INSTRUCTOR	Professor Katy Milkman

CLASS MEETINGS	Tuesdays and Thursdays, Jon M. Huntsman Hall Room 345

OFFICE HOURS	Email me, and we’ll set up an appointment.

OFFICE LOCATION	Jon M. Huntsman Hall 566

EMAIL	kmilkman@wharton.upenn.edu

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 Anupama Suryanarayanan (asuryana@wharton.upenn.edu) and Christopher Teng (cte@wharton.upenn.edu) and Ph.D. Candidate Edward Chang (changed@wharton.upenn.edu)

1. Overview

1.1 Background

Over the last 30 years, psychologists and economists have joined forces to study how people process information and actually make decisions, rather than how they would make decision 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 have taken PPE 203/PSYC 265: Behavioral Economics and Psychology, you should not take this class – the two classes have extensive overlap.
- 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.

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 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 (March 28th)

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 and performance in class participation. If you are not sure where to start, please talk to me and we will figure out a plan together.

**Twitter**

As an extension of our in-class learning experience, I will be tweeting throughout the course using the hashtag #OIDD290 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 #OIDD290 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: @RobertCialdini, @heathbrothers, @Opower, @StickK, @ideas42, @nudgeblog, @BrianWansink, @CFCamerer, @Atul_Gawande, @Gladwell, @CassSunstein, @deankarlan, @dilipsoman, @DanTGilbert, @francescagino, @StevenLevitt, @danariely, @R_Thaler, @m_sendhil, @MaxBazerman (see: https://twitter.com/OPIM290/lists/wharton-s-opim-290-list)

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 2nd):** Please plan to sign-up online with the group you plan to work with on your final project by March 2nd.

- **PROPOSAL (Due March 30th):** 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 me to talk through several ideas and choose the best one to work on.

- **PRESENTATIONS (April 18th & 20th):** 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 25th):** 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: I am often, but not always, on email. Therefore, to make sure that you get any information you need well before deadlines, please email me at least 24 hours before you need an answer, want to set up a meeting, etc.
### 3. Course Outline

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<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 12th</td>
<td>Introduction</td>
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<tr>
<td>2</td>
<td>January 17th</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>3</td>
<td>January 19th</td>
<td>Prospect Theory</td>
<td>Reading: Thaler &amp; Sunstein (2008)</td>
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<td>4</td>
<td>January 24th</td>
<td>Heuristics and Biases</td>
<td>Reading: Gladwell (2003); Gawande (1999)</td>
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<td>5</td>
<td>January 26th</td>
<td>Fairness and Cooperation</td>
<td>Reading: Brafman and Brafman (2008)</td>
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<td>6</td>
<td>January 31st</td>
<td>Fairness</td>
<td>Reading: The Kidney Case</td>
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<td>7</td>
<td>February 2nd</td>
<td>Current Research on Decision Processes</td>
<td>Due: Homework #2</td>
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<td>8</td>
<td>February 7th</td>
<td>Social Norms and Conformity (Guest Lecture: Marc Laitin, Senior Director of Product Management at OPower)</td>
<td>Reading: OPower Case</td>
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<td>9</td>
<td>February 9th</td>
<td>Intertemporal Choice and Want/Should Conflict</td>
<td>Reading: Wansink (2006)</td>
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<td>10</td>
<td>February 14th</td>
<td>Commitment Devices</td>
<td>Reading: Green Bank of the Philippines Case</td>
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<td>11</td>
<td>February 16th</td>
<td>Mental Accounting &amp; Goal Setting</td>
<td>Reading: Lieber (2010)</td>
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<td>12</td>
<td>February 21st</td>
<td>Selling Commitment Devices (Guest Lecture: Jordan Goldberg, CEO StickK)</td>
<td>Reading: Fox (2012)</td>
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<td>14</td>
<td>February 28th</td>
<td>Cognitive Dissonance, Confirmation Bias and Escalation of Commitment</td>
<td>Prepare: Tavris and Aronson (2007)</td>
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<td>15</td>
<td>March 2nd</td>
<td>The Challenger Launch Decision</td>
<td>Prepare: Challenger Case</td>
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<td>16</td>
<td>March 14th</td>
<td>Bounded Awareness, Overconfidence, and Bounded Ethicality</td>
<td>Reading: Gladwell (2009)</td>
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<td>17</td>
<td>March 16th</td>
<td>Warped Beliefs</td>
<td>Reading: Gertner (2003)</td>
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<td>19</td>
<td>March 23rd</td>
<td>Midterm Review</td>
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<td>20</td>
<td>March 28th</td>
<td>Midterm Exam</td>
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<td>21</td>
<td>March 30th</td>
<td>Influence and Nudging in the Wild I (Guest Lecture: Piyush Tantia, Executive Director of ideas42 &amp; Ted Robertson, Managing Director of ideas42)</td>
<td>Reading: Cialdini (1993)</td>
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<td>22</td>
<td>April 4th</td>
<td>Influence and Nudging in the Wild II (Guest Lecture: Annie Wang, Director of Analytics at the Analyst Institute)</td>
<td>Reading: Issenberg (2010); Cialdini (1993)</td>
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<td>23</td>
<td>April 6th</td>
<td>Influence and Nudging in the Wild III (Guest Lecture: Representative of Google's People and Innovation Lab)</td>
<td>Reading: Sullivan (2013); Duhigg (2016); Cialdini (1993)</td>
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<td>24</td>
<td>April 11th</td>
<td>Influence and Behavioral Economics in the Wild IV</td>
<td>Reading: Cialdini (1993)</td>
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<td>25</td>
<td>April 13th</td>
<td>In-Class Group Project Preparation</td>
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<td>26</td>
<td>April 18th</td>
<td>Final Project Presentations</td>
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<td>27</td>
<td>April 20th</td>
<td>Final Project Presentations</td>
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<td>28</td>
<td>April 25th</td>
<td>Conclusion</td>
<td>Due: Final Project 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 or Influence)

CLASS 1: INTRODUCTION
January 12th


CLASS 2: STANDARD ECONOMIC MODELS OF DECISION MAKING AND EXPERIMENTS
January 17th


CLASS 3: PROSPECT THEORY
January 19th


CLASS 4: HEURISTICS AND BIASES
January 24th


CLASS 5: FAIRNESS AND COOPERATION  
January 26th


CLASS 6: FAIRNESS  
January 31st


CLASS 7: CURRENT RESEARCH ON DECISION PROCESSES  
February 2nd

No reading assigned.

CLASS 8: SOCIAL NORMS AND CONFORMITY  
February 7th


CLASS 9: INTERTEMPORAL CHOICE AND WANT/SHOULD CONFLICT  
February 9th


CLASS 10: COMMITMENT DEVICES  
February 14th


CLASS 11: MENTAL ACCOUNTING & GOAL SETTING  
February 16th


CLASS 12: SELLING COMMITMENT DEVICES  
February 21st


Visit and familiarize yourself with www.stickk.com
CLASS 13: FOLLOW-THROUGH & MAKING BEHAVIOR CHANGE STICK  
February 23rd


CLASS 14: COGNITIVE DISSONANCE, CONFIRMATION BIAS AND ESCALATION OF COMMITMENT  
February 28th


CLASS 15: THE CHALLENGER LAUNCH DECISION  
March 2nd


CLASS 16: BOUNDED AWARENESS, OVERCONFIDENCE, AND BOUNDED ETHICALITY  
March 14th


CLASS 17: WARPED BELIEFS  
March 16th


CLASS 18: LIBERTARIAN PATERNALISM AND CHOICE ARCHITECTURE  
March 21st


CLASS 19: MIDTERM REVIEW  
March 23rd

No reading assigned.

CLASS 20: MIDTERM EXAM  
March 28th

No reading assigned.
CLASS 21: INFLUENCE AND NUDGING IN THE WILD I
March 30th


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CLASS 22: INFLUENCE AND NUDGING IN THE WILD II
April 4th


CLASS 23: INFLUENCE AND NUDGING IN THE WILD III
April 6th


CLASS 24: INFLUENCE AND NUDGING IN THE WILD IV
April 14th


CLASS 25: IN-CLASS GROUP PROJECT PREPARATION
April 16th

No reading assigned.

CLASS 26: FINAL PROJECT PRESENTATIONS
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


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**

