

Behavioral Economics & Behavioral Operations Management

Tu-Th 11:30am-1:00pm in B3570

Professor: Steve Leider

Office: R4424

Email: leider@umich.edu

Phone: (734) 615-4183

Office Hours: T, Th 10:00-11:30am & by appointment

Course Description

Behavioral economics combines lessons from psychology and economics to study how people process information and make decisions as employees, managers and consumers. Behavioral operations management applies those insights to managing business operations. These fields have provided an understanding of how people's decisions deviate from "optimal" (rational and selfish) choices, as well as the consequences of such deviations in management and the marketplace. This course is devoted to understanding the nature, causes and implications of these deviations. We will then consider how (a) managers and policy makers can intervene to improve decision making and outcomes and (b) how markets are organized around exploiting or remedying deviations from rational decision-making.

Learning Objectives

This course has three main objectives:

First, after completing this course, students will be able to identify when a behavioral factor we discuss may influence their own or others' decisions; and will understand why a policy, process or market has been instituted around that factor.

Second, this course will improve the abilities of the student (as a future manager) to influence the behavior of others (co-workers, consumers, etc.), particularly by identifying ways to intervene to encourage better decisions and better outcomes. Similarly, will empower students with easy-to-apply tools to recognize biases in and improve their own own decision making.

Third, this course will improve students' intuitive empirical abilities and understanding of how to evaluate a policy or program. People are often poor intuitive statisticians, leading to inferential errors and biased decisions. In learning about the foundational behavioral research the course will elucidate how we know what we know, and how to evaluate the effectiveness of new ideas in the workplace.

Relationship to other Ross Courses

This course is focused on managerial decision making rather than consumer decision making, which is the focus of MKT313. Both topics have some overlap, particularly in the fundamental psychology, since understanding consumers and colleagues often requires similar insights. Similarly, Behavioral Finance (FIN422) will look at similar psychological forces as applied to investment decisions. The applications that this course will connect those insights to are quite

different – focusing on improved managerial decision-making and understanding the structure of markets organized around irrationality. This course should nicely complement other Ross courses on behavior and decision making.

Required Course Materials

The required readings will be included in the course pack or posted to the course site on Canvas.

Many of the readings are chapters from several excellent books aimed at a broad audience. I encourage interested students who want a broader discussion of the issues we discuss to pick up one or more:

- Thinking Fast and Slow (Daniel Kahenman)
- Nudge (Richard Thaler and Cass Sunstein)
- Misbehaving (Richard Thaler)
- Predictably Irrational and The Upside of Irrationality (Dan Ariely)

Grades and Deliverables

The course grade will be determined as follows:

Class participation	20%
Homework assignments (individual)	40%
Final Project (Presentation and Paper)	40%

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. To contribute 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 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.

Classroom Device Policy

Laptop computers, tablets, mobile phones: The use of these devices are not allowed in the classroom when class is in session **except** for times the instructor asks students to bring a laptop for in class exercises that are part of the TO 435 learning experience.

Policy rationale: By staying focused on operations course material during class meetings, students will engage more actively with the classroom learning experience. This will increase the quality of learning and the value of the Michigan Ross BBA.

Problem Set Assignments (Individual)

Five homework assignments will be due throughout the term. Homework will be an **individual** exercise unless otherwise indicated. Homework is always **due by 11am on the day of class**, and will be submitted via Canvas.

Final Project (Group)

Design an Intervention to Solve a Societal/Managerial Problem: The Final Project allows students to apply the behavioral concepts they learned to a societal/managerial setting of interest. The professor will introduce and provide context for a broad problem area. Groups (3-4 students) will identify a specific problem within that space and develop a behavioral intervention to solve that problem. A central part of this project is to develop an argument for why their proposal should be implemented by the relevant stakeholders. Groups must research their specific setting (within the broader problem area) 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.

For example, a specific problem of interest within the general problem area of sustainability might be to address excessive paper use by employees in a specific company. A behavioral intervention to address the problem might involve mailings to workers emphasizing the importance of reducing paper consumption and comparing their amount of printing to their peers. In this example, the group would put together a compelling proposal designed to convince management at the company that they should implement the proposed intervention and detailing both how to deploy it and how to measure its effectiveness.

- PRELIMINARY GROUP SELECTION (March 10th): Sign-up online with the group you propose to work with on your final project by March 10th.
- MEETING WITH INSTRUCTOR (March 10th – March 24th): Prior to submitting the project proposal assignment each group should schedule a meeting with the instructor to talk through several ideas and choose the best one to work on.
- PROPOSAL (Due March 24th): Submit a 1-page, single-spaced summary of the planned project. The instructor will provide additional feedback on these project proposals.
- PRESENTATIONS (April 16th/21st): Each group will have between 10 and 20 minutes (depending on the final number of groups) to present their project to the class. Feedback from the class and the instructor will help the students further improve their paper in advance of the final paper submission.
- PAPERS (Due April 28th): Each group must submit a 10 page, double-spaced paper on their project. The paper should describe the specific setting, define the problem, give a detailed proposal of the behavioral intervention, briefly summarize the relevant research supporting the intervention, and identify a means for evaluating the efficacy of the intervention.

RSB Standard Syllabus Statements

The Ross learning experience transforms students by developing the ability to think rigorously, work collaboratively, and lead effectively. The classroom and course work are the foundational components of the Ross learning and growth process. Classroom activities are central to each student's experience – an experience they share with their classmates and faculty to develop each student's knowledge and personal growth and that of the student body as whole. Due to the importance of this shared experience, students should attend all classes, arrive on time, stay in class throughout and be prepared to contribute to the learning process for all. The expected level of engagement goes far beyond mere physical presence in class. Rather, students should come to each class having read all material, prepared all assignments, and ready to share their insights, thoughts and intellectual struggles with their classmates. Students should remain engaged and attentive throughout class, both for their own learning and in respect to the rest of the Ross community. Violations of these expectations will be reflected by reductions of the class participation grade as well as other penalties the faculty may view as appropriate.

Academic Honor Code:

This course will be conducted in strict conformity with the Academic Honor Code because personal integrity and professionalism are core values of the Ross community. The Code and related procedures can be found at <http://www.bus.umich.edu/Academics/Resources/communityvalues.htm> . The site also contains comprehensive information on how to be sure that you have not plagiarized the work of others. Claimed ignorance of the Code and related information appearing on the site will be viewed as irrelevant should a violation take place. Non-Ross students taking the course should also familiarize themselves with the Code as they will be subject to the Code as well while in this course.

Special Considerations:

The University of Michigan is committed to providing equal opportunity for participation in all programs, services and activities. Students wishing to receive testing accommodations must register with the UM SSD ([Services for Students with Disabilities](#)) as soon as possible. Students must then submit their Verified Individualized Services and Accommodations (VISA) form via online web form as early as possible, but **no later than two weeks prior to the test or quiz for which accommodations are requested.**

Requests only need to be submitted once during your academic career at Ross. If you have already received accommodations you do not need to resubmit your paperwork. For NEW accommodation students, requests must be sent using the [Accommodations Request form](#) and must include:

- a scanned or photographed copy of the VISA form
- your name
- the classes and related section numbers

All requests must be made via the web form. Questions can be directed to the Accommodations Coordinator at RossAccommodationsCoordinator@umich.edu .

In rare cases, the need for an accommodation arises after the two-week deadline has passed (for example, a broken wrist). In these cases, the student should still contact SSD and the Ross Accommodations Coordinator at RossAccommodationsCoordinator@umich.edu, however, due to logistical constraints we cannot guarantee that an accommodation can be made after the two-week deadline has passed.

Student Well-Being:

As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The University of Michigan is committed to advancing the mental health and wellbeing of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. You can learn more about the broad range of confidential mental health services available on campus via www.umich.edu/~mhealth.

The Ross School of Business has a Counseling and Psychological Services (CAPS) Embedded Counselor available to its students. Embedded Counselors are located in school/college building and services are tailored to the school's climate. For more information, please visit caps.umich.edu/caps-embedded-model. To schedule, please email Julie Kaplan, LMSW at jrkaplan@umich.edu. You may also consult University Health Services (UHS) at (734) 764-8320 and <https://www.uhs.umich.edu/mentalhealthsvcs>, or for alcohol or drug concerns, see www.uhs.umich.edu/aodresources.

Class Topics and Readings

(See also the summary grid on the last two pages of the syllabus)

Jan 14 – Introduction

Jan 16 – How Do We Change Behavior?

Applications: Understanding data from the lab and the field, Implementing behavioral change initiatives

Readings: Brooks, D. (2011). "Who You Are," The New York Times, October 20, 2011.

Soman, D. (2015) "A Lawyer, an Economist, a Marketer, and a Behavioral Scientist Go into a Bar..." The Psych Report, Oct. 21, 2015

Commonwealth Bank of Australia: Unbanklike Experimentation, HBS Case #9-619-018, Harvard Business School Press

Jan 21 – Risk and Decision Making

Jan 23 – Prospect Theory

Applications: Loss aversion and financial incentives, insurance uptake, endowment effect

Readings: Kahneman, D. (2011) Thinking Fast and Slow Ch. 25 "Bernoulli's Errors" & Ch. 26 "Prospect Theory"

Barberis, N. (2013): "Thirty Years of Prospect Theory in Economics: A Review and Assessment," Journal of Economic Perspectives, 27(1): 173-196. (NOTE: focus on the Applications sections)

Jan 28 – How We Form Beliefs

Jan 30 – Forecasting and Planning

Applications: Communicating risks, effective forecasting processes, incorporating decision support

Readings: Thaler, R. and Sunstein, C. (2009) Nudge Ch. 1 "Biases and Blunders"

Kahneman, D. (2011) Thinking Fast and Slow Ch. 18 "Taming Intuitive Predictions"

Frick, W. (2018). "3 Ways to Improve Your Decision Making," Harvard Business Review, Jan 22, 2018.

Feb 4 – Overconfidence & Motivated Reasoning

Feb 6 – Markets Driven By Beliefs

Applications: Entering Competition/Entrepreneurship, CEO behavior, Media markets and Fake News

Readings: Lovallo, D., and D. Kahneman (2003). "Delusions of Success" Harvard Business Review, 81: 56-63.

Feb 11 – Bounded Awareness**Feb 13 – Markets for (In)Attention**

Applications: Shrouded prices, Taxes and Inattention, Digital Media Platforms, Privacy

Readings: D. Darlin (2006) “What the Naïve Consumers Don’t Know, Can Help You” New York Times, July 22, 2006.

Tufekci, Z. (2018) “YouTube, the Great Radicalizer” New York Times, March 10, 2018.

Feb 18 – Intertemporal Choice and Self-Control**Feb 20 – Markets Based on Limited Self-Control**

Applications: Procrastination, Savings, Selling commitment

Readings: Ariely, D. (2009) Predictably Irrational Ch. 7 “The Problem of Procrastination and Self-Control”

Feb 25 – Making Behavioral Changes Stick**Feb 27 – Nudges and Choice Architecture**

Applications: Defaults and active choice, UX for good and bad, Reminders and Social Accountability

Readings: Thaler, R. and Sunstein, C. (2009) Nudge Ch. 4 “When do we need a Nudge?” & Ch. 5 “Choice Architecture”

**** SPRING BREAK ****

Mar 10 – Introduction of Final Paper Topic**Mar 12 – Happiness and Utility**

Applications:

Readings: Decision-Making for the Triple Bottom Line, University of Michigan Erb Institute, June 2017

Hamburgh (2016) “Can money buy happiness?”, The Guardian, 1/7/2016

Mar 17 – Fairness, Altruism and Cooperation**Mar 19 – Status and Social Norms**

Applications: Charitable Giving, Bargaining, Pricing, Social influence and sustainability

Readings: Thaler, R. (2015) Misbehaving Ch. 14 “What Seems Fair” & Ch. 15 “Fairness Games”

Keller, S. (2012), “Social Pressure Is a Better Motivator Than Money,” Harvard Business Review, Sep 18, 2012.

Mar 24 – Trust and Supply Chains**Mar 26 – Limits to Strategic Sophistication**

Applications: Supply Chain collaboration, Auctions, Winner’s Curse,

Readings: Harford, T. (2010) “The Economics of Trust,” Forbes, Jul 21, 2010

Thaler, R. (1988) “The Winner’s Curse,” Journal of Economic Perspectives, Vol. 2, No. 1, p. 191-202

Mar 31 – Work and Productivity**Apr 2 – Creativity and Human Centered Design**

Applications: Peer effects in productivity, Meaning in Work, New Product Development

Readings: Ariely, D. (2010) The Upside of Irrationality Ch. 2 “The Meaning of Labor”

DC Design (2017), “What Is Human Centered Design” Medium.com

Apr 7 – Managing Service Operations**Apr 9 – Norms, Repugnance and the Structure of Markets**

Applications: Service/Queue design, Information in Service settings, Operational Transparency, Blood donation, Kidney exchange

Readings: S. Neo (2013) "Shinkansen & its World-Class Service Management", Globis Insights, July 1, 2013

Sullivan, B. (2018) "Know Your Nuggets: Operational Transparency" People Science, July 17, 2018.

Cohen, P. (2008), "Economists Dissect the 'Yuck' Factor." New York Time, Jan 31, 2008.

Apr 14 -Matching and Market Design

Applications: Food bank resource allocation pseudo-markets

Readings: Feeding America (A), HBS Case #N9-818-130, Harvard Business School Press

<i>Class</i>	<i>Date</i>	<i>Topics</i>	<i>Readings</i>	<i>Deliverables</i>
1	Jan 14	Introduction	Brooks, Soman	
2	Jan 16	How Do We Change Behavior?	Commonwealth Bank of Australia Case	
3	Jan 21	Risk and Decision Making	Kahneman Ch. 25	
4	Jan 23	Prospect Theory	Kahneman Ch. 26, Barberis	
5	Jan 28	How We Form Beliefs	Thaler and Sunstein Ch. 1	HW 1 Due
6	Jan 30	Forecasting and Planning	Kahneman Ch. 18, Frick	
7	Feb 4	Overconfidence & Motivated Reasoning	Lovallo and Kahneman	
8	Feb 6	Markets Driven By Beliefs		
9	Feb 11	Bounded Awareness	Darlin	HW 2 Due
10	Feb 13	Markets for (In)Attention	Tufekci	
11	Feb 18	Intertemporal Choice and Self-Control	Ariely Ch. 7	
12	Feb 20	Markets based on Limited Self Control		
13	Feb 25	Making Behavioral Changes Stick	Thaler and Sunstein Ch. 3	
14	Feb 27	Nudges and Choice Architecture	Thaler and Sunstein Ch. 5	HW 3 Due
-	Mar 3-5	SPRING BREAK		

<i>Class</i>	<i>Date</i>	<i>Topics</i>	<i>Readings</i>	<i>Deliverables</i>
15	Mar 10	Introduction of Final Paper Topic	Decision-Making for the Triple Bottom Line	Final Project Groups Due
16	Mar 12	Happiness and Utility	Hamburgh	
17	Mar 17	Fairness, Altruism and Cooperation	Thaler Ch. 14 & 15	
18	Mar 19	Status and Social Norms	Keller	HW 4 Due
19	Mar 24	Trust and Supply Chains	Harford	Project Proposals Due
20	Mar 26	Limits to Strategic Sophistication	Thaler	
21	Mar 31	Work and Productivity	Ariely Ch. 2	
22	Apr 2	Creativity and Human Centered Design	DC Design	HW 5 Due
23	Apr 7	Managing Service Operations	Neo, Sullivan	
24	Apr 9	Repugnance and the Structure of Markets	Cohen	
25	Apr 14	Matching and Market Design	Feeding America	
26	Apr 16	Final Presentations #1		
27	Apr 21	Final Presentations #2		
28	Apr 28			Final Paper Due