ECON 055: BEHAVIORAL ECONOMICS

(10:30 AM-Noon and 1-2 PM, MTWTh)

Professor: Syon Bhanot (<u>sbhanot1@swarthmore.edu</u>)

Professor Office Hours: see Section II

TAs: Katherine Capossela (<u>kcaposs1@swarthmore.edu</u>); Julia Botkin (<u>jbotkin1@swarthmore.edu</u>); Shaurya Bhaskar (<u>sbhaska1@swarthmore.edu</u>); Kaavya Arakoni (<u>karakon1@swarthmore.edu</u>)

TA Office Hours: see Section II

I. Introduction

In the past 50 years, economists have increasingly used insights from psychology to explore the limitations of the standard economic model of rational decision-making - a field now known as "behavioral economics." This course is an introduction to the central concepts of behavioral economics, touching on related research in psychology and experimental economics. We will also discuss the public policy implications of this work, and current policy applications of behavioral research around the world. Topics covered include: self-control, procrastination, fairness, cooperation and reciprocity, reference dependence, and choice under uncertainty.

II. Class Meetings and Office Hours

You will receive calendar invites to all course sessions, including lectures, TA/Professor/Busara office hours, guest speakers, etc., with a Zoom link and passcode provided in the calendar invite. Asynchronous sessions will not have calendar invites, however.

Class Meetings

Class meets Mondays, Tuesdays, Wednesdays, and Thursdays in two separate sessions (from 10:30 AM – Noon EST and from 1 PM – 2 PM EST). Note that we will <u>not</u> have formal material in both of these times slots EVERY day (see the schedule later in the syllabus), and we will have some asynchronous (pre-recorded) sessions.

Because of its size and the remote learning setup, this is mostly a lecture-based course. I will post lecture slides and other notes on the course Moodle page. Additionally, I will post video from ALL classes (live and asynchronous) to YouTube (see link in Moodle). You will need to take notes on your own as we go – this is critical, since slides are not always text-heavy.

Professor Office Hours

Professor Bhanot will hold two types of office hours, both using Zoom. See details and a full schedule below.

• First, there will be <u>open office hours</u> twice a week during unused "class time" periods (see schedule later in the syllabus); all are always welcome to these. I will have to manage this based on attendance — when many students are present, I will ask students to ask questions/raise hands via the chat feature, which I can then go through in order. If there are

- fewer students in attendance, the session can be a more traditional small group experience with verbal questions/discussion.
- Second, I will have one or more blocks of <u>by-appointment</u> small-group office hours available every week. You can sign up for a 15-minute slot either on your own or with a small group (a max of 5) here: https://wase.swarthmore.edu/swarthmore/views/pages/makeappt.php?calid=382. This link is also in the calendar invites for the by-appointment office hour blocks. Note that I cannot guarantee individual meetings. The class is too large to guarantee this; others will be able to sign up to "join" your time slot (a max of <u>five people</u> can sign up for any given time slot). If individual students are taking too many slots, I may need to limit the number of times a student can attend in a given week (right now a student can sign up for up to two 15-minute slots per by-appointment office hour session block).

Office Hours for Prof. Bhanot	Type of OH Times		
Wednesday, Jan. 6	Open	1pm-2pm EST	
Thursday, Jan. 7	Open	10:30am-Noon EST	
Thursday, Jan. 7	By Appt.	2:30pm-4:30pm EST	
Monday, Jan. 11	Open	10:30am-Noon EST	
Monday, Jan. 11	By Appt.	2:30-4:30pm EST	
Wednesday, Jan. 13	Open	1pm-2pm EST	
Wednesday, Jan. 13	By Appt.	2:30pm-4pm EST	
Monday, Jan. 18	By Appt.	2:30pm-4:30pm EST	
Tuesday, Jan. 19	Open	10:30am-Noon EST	
Wednesday, Jan. 20	Open	1pm-2pm EST	
Monday, Jan. 25	By Appt.	2:30pm-4:30pm EST	
Tuesday, Jan. 26	Open	10:30am-Noon EST	
Thursday, Jan. 28	Open	10:30am-Noon EST	
Thursday, Jan. 28	Open	1pm-2pm EST	

TA Office Hours

The course's TAs will also have weekly office hour sessions on Zoom. The schedule is below, and the links to the Zoom sessions are in the relevant calendar invites.

TA Name	Office Hours		
Kat	Mondays 7:30-9:30 PM EST		
Julia	Tuesdays 7-9 PM EST		
Shaurya	Wednesdays 4:30-6:30 PM EST		
Kaavya	Sundays 11 AM-1 PM EST		

Busara Office Hours

Finally, staff from the Busara Center for Behavioral Economics will have office hours on Zoom as well, specifically to discuss their work and (more importantly) your group's experimental designs. The schedule is below, and the links to the Zoom sessions are in the relevant calendar invites.

Office Haves for Business	Turn of OU	Times
Office Hours for Busara	Type of OH	Times
Tuesday, Jan. 12	Open	9:00am-10:00am EST
Wednesday, Jan. 13	Open	9:00am-10:00am EST
Thursday, Jan. 14	Open	9:00am-10:00am EST
Tuesday, Jan. 19	Open [Overlaps with Prof Bhanot]	10:30am-Noon EST
Thursday, Jan. 21	Open	9:00am-10:00am EST
Monday, Jan. 25	Open	9:00am-10:00am EST
Tuesday, Jan. 26	Open [Overlaps with Prof Bhanot]	10:30am-Noon EST

III. Classroom Expectations

- 1. Please be on time to live classes.
- 2. I expect students' full attention in class. I would love if you could keep your cameras on but recognize this might not always be possible.
- 3. Special accommodations: If you believe you need accommodations for a disability or a chronic medical condition, please contact Student Disability Services via email at studentdisabilityservices@swarthmore.edu to arrange an appointment to discuss your needs. As appropriate, the office will issue students with documented disabilities or medical conditions a formal Accommodations Letter. Since accommodations require early planning and are not retroactive, please contact Student Disability Services as soon as possible. For details about the accommodations process, visit the Student Disability Services website. You are also welcome to contact me privately to discuss your academic needs. However, all disability-related accommodations must be arranged, in advance, through Student Disability Services.

IV. Course Materials

- 1) Textbook: There is no formal, required textbook for this course, though Sanjit Dhami's "The Foundations of Behavioral Economic Analysis" provides a solid (if occasionally a bit advanced) resource for those interested. Other books worth perusing include "Misbehaving: The Making of Behavioral Economics" by Richard Thaler, "Thinking, Fast and Slow" by Daniel Kahneman, and "A Course in Behavioral Economics" by Eric Angner.
- 2) Papers/Articles/Audio/Visual: You will have assigned required reading/articles for each week, all of which are on the Moodle page. The articles include a mix of technical (i.e., for academic audiences) and non-technical work that elucidate or exemplify the concepts we discuss, or bring them to bear on real-world issues. There will be occasional audio (podcast) and video content as well, also made available on Moodle.

V. Assignments

There are several kinds of assignments in this course, outlined below. Please also find the full assignments calendar with due dates below the numbered descriptions.

- 1) Discussion Questions (3) and Quizzes (2): There will be three discussion questions and two multiple-choice, open-book, and timed quizzes spread through the course (sent out via email with link to submission page). These can all be completed anytime before 11:59 PM EST on their due dates, and are to be submitted individually. You have 45 minutes to complete each of the quizzes. Quizzes will be sent by email at noon EST on their dates, and discussion questions will go out a couple of days prior to their due date. You may not work with other students on these assignments, or discuss them with other students. Completion of ALL of these assignments is required.
- 2) Final Group Project: Students will (in groups of no more than five) design their own behavioral economics inspired experiments. We will then implement a select number of these projects (ideally all of them!) in Kenya with real subjects, through the Busara Center for Behavioral Economics. Each group will have an assigned TA and a small team of staff from the Busara Center to support your efforts. There are two group assignments related to this project:
 - 1) A 3-5 page outline/skeleton of the project, due on January 14th (11:59 PM EST). Feedback will be provided to each group at this stage, which will inform ensuing work.
 - 2) A final project (a ~10 page paper/project protocol), due January 26th (11:59 PM EST). The final project will require you to both motivate the project/hypotheses you propose, conceptually, as well as lay out exactly how you wish Busara to implement the experiment.
- **3) Final Exam:** There is a 90-minute, cumulative, and open-book final exam on January 28. It will be entirely multiple choice and distributed by email at <u>noon EST</u> (with an 11:59 PM EST submission deadline).

Assignments Calendar			
Discussion Question 1	sent Jan 6, 6am EST due Jan 8, 11:59pm EST		
Quiz 1	sent Jan 11, noon EST due Jan 11, 11:59pm EST		
Group Project Sketch/Outline	due Jan 14, 11:59pm EST		
Discussion Question 2	sent Jan 13, 6am EST due Jan 15, 11:59pm EST		
Quiz 2	sent Jan 19, noon EST due Jan 19, 11:59pm EST		
Discussion Question 3	sent Jan 20, 6am EST due Jan 22, 11:59pm EST		
Group Project Final Paper	due Jan 26, 11:59pm EST		
Final Exam	sent Jan 28, noon EST due Jan 28, 11:59pm EST		

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VI) Grading

Grades will be determined as follows:

• Discussion Questions (3): 15%

• Quizzes (2): 20%

• Group Project – Sketch/Outline: 10%

• Group Project – Final Paper: 25%

• Final: 30%

VI) Course Website

I will be using the course Moodle as the webpage for this course. I will post all readings, weekly assignments, and other materials there. I will also use Youtube for posting class videos, as noted earlier.

VII) Course Outline and Readings

The course outline is below. Readings, other materials, and assignments are listed. Don't feel pressure to complete all the readings before the first class of a given week; it's ok to read as we go. Also note that I mention skimming the readings sometimes. This is primarily to encourage you to skim statistical/mathematical areas of papers, where the content may be a bit too advanced at times, and because some of the readings can be a bit long (I don't want you to think you have to read every single word of these long readings!). Any questions – don't hesitate to ask!

	Timing: 10:30 AM-Noon EST		Timing: 1-2 PM EST	
Date	Morning Session Plan	Live? Asynch?	Afternoon Session Plan	Live? Asynch?
Mon, Jan 4	Introduction and Rationality I	Live	Rationality II and Transition to BE	Live
Tue, Jan 5	Prospect Theory and Loss Aversion I	Live	Prospect Theory and Loss Aversion II	Live
Wed, Jan 6	Busara/Experiments Intro	Live	Open Zoom Office Hours	Live
Thu, Jan 7	Open Zoom Office Hours	Live	GUEST SPEAKERS (2)	Live
Mon, Jan 11	Open Zoom Office Hours	Live	Endowment Effect and Anchoring	Asynch
Tue, Jan 12	Status Quo Bias and Defaults	Live	GUEST SPEAKERS (2)	Live
Wed, Jan 13	Mental Accounting and Choice	Asynch	Open Zoom Office Hours	Live
Thu, Jan 14	Probability, Salience, Etc I	Live	Behavioral Development Economics	Asynch
Mon, Jan 18	Probability, Salience, Etc II	Live	Catch Up/Overconfidence	Live
Tue, Jan 19	Open Zoom Office Hours	Live	Present Bias and Self Control I	Asynch
Wed, Jan 20	Present Bias and Self Control II	Asynch	Open Zoom Office Hours	Live
Thu, Jan 21	Overconfidence and Social Preferences I	Live	GUEST SPEAKERS (2)	Live
Mon, Jan 25	Social Preferences II	Live	GUEST SPEAKERS (2)	Live
Tue, Jan 26	Open Zoom Office Hours	Live	Social Influence	Asynch
Wed, Jan 27	Discrimination and Identity	Live	Finance and Public Policy	Asynch
Thu, Jan 28	Open Zoom Office Hours	Live	Open Zoom Office Hours	Live

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Busara Studies [These are not required readings - these are examples for you to see the kind of work Busara does and the sorts of experiments that are possible with Busara. These will not be on the quizzes/final but are *resources* for you to help inform your final projects. All PDFs here have the "Busara –" prefix in Moodle's "Readings" folder. You can also find more case studies from Busara here. And of course you can search for other behavioral experiments online for inspiration (I encourage you to look for lab or online experiments rather than field experiments, as field experiments may not be implementable for Busara…)!]

- Addressing Gender-Based Violence Norms and Behaviors *note there are two PDF files for this one a blog post and a case study*
- o Using Behavioral Informed Communication to Drive Civic Engagement
- o Improving Retirement Savings Among Informal Sector Workers
- o Nudges to Improve Digital Fundraising Activity
- o How Much Does Attention Cost?
- o Encouraging Attendance for Vaccine Information Sessions
- Using Lotteries to Encourage Savings *there is both a paper and a 4 page summary, in separate PDFs*
- O Cognitive Biases (Enke, et al., 2020) *this is a long PDF but most of it is an Appendix; the paper covers several behavioral studies done at Busara though*
- Workfare, Wellbeing, and Consumptions (Bhanot, et al., 2018) *this is a field experiment I did with Busara you will likely not be designing a field experiment, but it might be useful for context on the types of sample populations you might study*

Week 1 – Jan 4-7 (160 pages; 121 of these are skim readings)

Introduction and Rationality (94 pages; 82 of these are skim readings)

- o Psychology and Economics: Evidence from the Field (DellaVigna, 2009) *skim this it's a long one that you can basically use as a resource all semester*
- o Adam Smith: Behavioral Economist (Ashraf, et al., 2005)
- Back to Bentham?: Explorations of Experienced Utility (Kahneman, et al., 1997) *skim this; and don't stress too much about the formal mathematical parts of this we will discuss the key elements (for our purposes) in class*

Prospect Theory and Loss Aversion (66 pages; 39 of these are skim readings)

- Prospect Theory: An Analysis of Decision Under Risk (Kahneman & Tversky, 1979) *skim
 this when it gets more technical if need be the next reading reviews the theory and
 may prove clearer for some*
- o Thirty Years of Prospect Theory in Economics (Barberis, 2013)
- Overcoming an Aversion to Loss (Richards, 2013)
- Anomalies Risk Aversion (Rabin & Thaler, 2001) *the basic analytical idea of this paper will be discussed in class if you understand our intuitive discussion in class, you can just skim this*
- o How Uber Drivers Decide How Long to Work (Scheiber, 2016)

Week 2 – Jan 11-14 (187 pages; 38 of which are skim readings)

The Endowment Effect and Anchoring (44 pages)

- Anomalies The Endowment Effect, Loss Aversion, and Status-Quo Bias (Kahneman, et al., 1991)
- Coherent Arbitrariness: Stable Demand Curves Without Stable Preferences (Ariely, et al., 2003)

Status Quo Bias and Defaults (63 pages; 38 of these are skim readings)

- o The Importance of Default Options for Retirement Savings Outcomes (Beshears, et al., 2006)
- o The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior (Madrian & Shea, 2001) *you can skim this; a lot of this is covered by the prior reading but this was the first paper to elevate these default findings, so I thought it was worth including!*

Mental Accounting and Choice (45 pages)

- o Mental Accounting Matters (Thaler, 1999)
- o Bitter Money and Christmas Clubs (Surowiecki, 2006)
- o The Paradox of Choice (Prologue and Chapter 1 only) (Schwartz, 2004)

Behavioral Development Economics (35 pages; plus report to lightly skim through)

- World Development Report 2015 *read Overview (p. 21-40 of PDF) and Ch. 4 (p. 99-110 of PDF), lightly skim the rest as you wish*
- o Some Consequences of Having Too Little (Shah, et al., 2012)
- o AUDIO: The Scarcity Trap (Hidden Brain Podcast)

Week 3 – Jan 18-21 (127 pages)

Probability, Salience, Etc. (46 pages)

- o AUDIO: How to Make a Bad Decision (Freakonomics Podcast)
- o Judgement under Uncertainty: Heuristics and Biases (Tversky & Kahneman, 1974)
- o Availability: A Heuristic for Judging Frequency and Probability (Tversky & Kahneman, 1973)
- o The Role of Emotion in Economic Behavior (Rick & Loewenstein, 2008)

Present Bias and Self-Control (22 pages)

- o Anomalies Intertemporal Choice (Loewenstein & Thaler, 1989)
- o Present Bias: Lessons Learned and To Be Learned (O'Donoghue & Rabin, 2015)
- o Delayed Gratification (Surowiecki, 2012)

Overconfidence (24 pages)

Overconfident Consumers in the Marketplace (Grubb, 2015) *feel free to skim some of the more technical models later in the paper – the intuition is the key*

Social Preferences (35 pages)

- What Do Laboratory Experiments Measuring Social Preferences Reveal About the Real World? (Levitt & List, 2007)
- o How to Get People to Pitch In (Yoeli, et al., 2015)
- Fairness as a Constraint on Profit Seeking: Entitlements and the Market (Kahneman, et al., 1986)

Week 4 – Jan 25-28 (216 pages; some can be skimmed)

Social Influence (39 pages; some of which is skim-able)

- o Social Norms and Energy Conservation (Allcott, 2011) *skim technical parts*
- o Do We Always Follow the Crowd? Some Surprising Evidence from Peer Savings Information (Bhanot, 2015)
- o We Know How to Curb the Pandemic. How Do We Make People Listen? (Tingley, 2020)
- o Isolating the Effect of Injunctive Norms on Conservation Behavior: New Evidence from a Field Experiment in California (Bhanot, In Press) *skim technical parts*
- o The Psychology of Inequality (Kolbert, 2018)

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Discrimination and Identity (78 pages; some of which is skim-able)

- o AUDIO: What Are Gender Barriers Made of? (Freakonomics Podcast)
- Are Emily and Greg More Employable Than Lakisha and Jamal? (Bertrand & Mullainathan, 2004) *skim technical parts*
- Gender and Competition (Niederle & Vesterlund, 2011) *can bounce between skimming and reading this*
- The Whys of Social Exclusion: Insights from Behavioral Economics (Hoff & Walsh, 2018)
 can bounce between skimming and reading this
- o The Hidden Taxes on Women (Mullainathan, 2018)

Finance (39 pages)

- Anomalies The Law of One Price in Financial Markets (Lamont & Thaler, 2003) *don't worry too much about the finance-y stuff; try to focus on the bigger, behavioral picture/logic at play here*
- o Anomalies Saving, Fungibility, and Mental Accounts (Thaler, 1990)
- o How to Trick People Into Saving Money (Walker, 2017)
- o To Subsidize or to Nudge: What the Danes Can Teach Us About Savings and Retirement (Bhanot, 2015) *we will discuss this in class but this remains a useful resource!*

Public Policy (60 pages + video)

- VIDEO: Ely Lecture by Raj Chetty on "Behavioral Economics and Public Policy: A Pragmatic Perspective" Link: https://www.aeaweb.org/webcasts/2015/Ely.php
- o Applying Insights from Behavioral Economics to Policy Design (Madrian, 2014) *you can skim this as some of it covers ground covered by other readings*
- o Can Behavioral Science Help in Flint? (Stillman, 2017)
- o Behavioral Economics: Past, Present, and Future (Thaler, 2016)