Behavioral Economics

Lecture 0: Introduction

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Our Outline

1. About Me
2. Is This Course Right for You?
3. What Can You Expect?
4. How Will You Be Evaluated?
5. What Even Is Behavioral Economics?

Here We Are

Welcome. Have fun. Relax. Enjoy yourself.

Learning sucks. It's hard, and—unlike in many courses you've taken in the past—in this course you may **actually learn**. But this is hard.

You have access to a variety of tools that are extremely helpful.

Use those tools. But the most important tool remains me. (Ha, I'm a tool.)

Introduction: About Me

Me: I arrived at MSU in 2017. I was previously at Harvard.

This class is a grab-bag of material from:

- Harvard University (graduate course)
- University of California, Berkeley (graduate course)
- UC San Diego (graduate course)
- Cornell (undergraduate course)

...so, yeah, it will be challenging. Hopefully, you'll find it fun!

My research: I study a number of topics in psychology and economics, many which we will cover this term.

New Year, New You

By the time most people reach this course, their curiosity for learning economics has diminished greatly.

- My goal is to reignite that fire.

I want to remind you (or show you for the first time) that economics is a powerful tool for understanding the world that we all jointly inhabit.

Perhaps the deepest way to understanding our world is found from following the age-old wisdom **know thyself**.

Success in *this course* often follows the slightly-more-modern credo of Ted Lasso:

Be curious, not judgmental

Introduction: This Course

The Course In One (Frightening) Line

I teach using “math”

Don’t be afraid. The math won’t hurt you.

Intuitions in *psychology* are important. But intuitions are often misleading. Our comparative advantage as *economists* is in formalism: specifically defining ideas and clearly spelling out the implications of assumptions.

This is good: economists shape policy more than other social sciences

. . . but bad in the sense that you will have to be open-minded to learning ideas through the lens of mathematics

Introduction: This Course

What this means: problem sets are how you'll really learn the material.

Since there is little-to-no reading, you should plan on allocating more time than average to these problem sets.

A sample comment from fall semester this year:

- "The difficulty of the class was a bit ridiculous. Prof was reasonable grading on HW assignments and writing assignments but would make exams significantly different than other example problems. Literally stated before the exam 'you can use a 1 page as a note sheet for the exam and can write anything you want on it, but it won't actually help you'."
- I have done nothing to address this comment. (Other feedback was positive)

If you are concerned about this course, please come see me **soon**.

Introduction: Logistics

The syllabus is posted on D2L and on the course website.

Don't open it now. Read it later – it's long.

(But eventually, please read it. It is "required.")

Syllabus highlights:

- Grade is mostly composed of problem sets, exams, and a written assignment.
  - Problem Sets: 32%
  - Exams: 49%
  - Writing Assignment: 11%
- Exams will follow from and extend problem sets.
- Writing assignment will be straightforward, I promise.

  (Writing assignment fulfills MSU requirement for Tier II writing)

Introduction: A Note on Grades

You are **entitled** to the raw score grade that you have earned based on the syllabus.

- "Standard" cutoffs apply
  $>92\% \rightarrow 4.0$
  87-92% $\rightarrow$ 3.5
  82-97% $\rightarrow$ 3.0
  77-82% $\rightarrow$ 2.5
  ... you get the idea. Also, if you're looking down here, aim higher.

However, I reserve the right to **increase** grades.

- I'm aware that the course is hard. It's meant to be hard. If grades are the most important thing for you, I recommend (1) speaking with me; and (2) decide whether this is the right class for you. Success is very achievable in this course, but you'll have to work in a way that might be very new to some of you.

Introduction: This Course

There is no text for this course.

That's good (yay, no book) and bad (you need to come to lecture, pay attention, and ask questions).

Please please please please please: come to office hours.

- Some of the problems on problem sets and exams are quite hard.
- Sometimes the material itself will be confusing or interesting—or both!
- Office hours are the best way to get answers to any questions, even not-quite-fully-thought-out questions or silly questions.

Return of the Please: Ask questions in class. I get bored easily and the material is best understood by fully engaging with the subject matter.

Introduction: Pre-Apologies

Because I am a flawed human being who is trying his best:

- Some of the lectures will be too long or too short.
- Some of the content won't make sense (mostly due to me making verbal misstatements or algebraic errors)
- Some of the time I'll forget what I intended to say and awkwardly stare at you for a few moments (sorry).

Please feel free to comment throughout the course, not just at the end.

The material will improve with time and feedback.

I encourage thoughtful feedback and thoughtful responses to questions. If I call on you and you don't know immediately, don't freak out. Take your time. Relax. If you don't know after a minute, it's okay to say you don't know.

I will try to avoid asking questions that you won't know.

Introduction: Your Responsibilities

Come to class. Not totally required, but for realz it will be hard to pass if you don't come to lecture.

Ask questions. Please. There are no bad questions (yes there are) even if I mock the question a little bit. (I probably won't.)

And I want to learn all your names. Seriously.

- Unless I know your name, I will call on you as ... That Guy.
- If you are That Guy, then...

  ugh, do better. Nobody wants to be That Guy.
- And don't be a smart-ass, just give me your name.

Be patient...

My memory is bad and there are lots of you (but only one YOU)

(Almost) Last Intro Slide

Your “assignment”: read syllabus.

Things to stress from syllabus:

- E-mail is the best way to contact me.
- No appointments necessary for regularly scheduled office hours (Tues and Thurs, 4:15 - 5:30); or by appointment.
- Can only reschedule exams (with good reason) if you tell me **before** the exam that you have a conflict.
- Notify me immediately if you have RCPD-approved accommodations or need accommodations for religious convictions. If you approach me at the last minute, I may not be able to help.

Despite my hard-assness in these intro slides: **I am here to help**. Those who seek help early and often will benefit.

Real Last Intro Slide

Yes, this course is hard. But I want you to succeed and it's hard for a reason.

Every problem has a purpose. If you want to know why something is hard, ask me and I'll let you know why I'm forcing you to struggle through something.

My vow to you: I care about you as a student and person and I'll try really f&%$ing hard to make this course the most enjoyable and enriching of your college years.

The "Science" of Economics

Goal: To understand the economic outcomes that we observe in the world, and to design policies to improve economic outcomes.

Our goal in this course: To use and embrace the

- **substance**
- **techniques**
- **annoying mathematical notation**, and, most importantly,
- **goals**
  - tractable models with economic consequences
  - (not mere psychological accuracy)
  - ability to do comparative statics
  - calibrational relevance, and
  - empirical implementability

of standard economic analysis, but focus on introducing psychological factors often under-emphasized by economists.

What is “behavioral economics”?

In brief: behavioral economics attempts to incorporate more realistic assumptions into economics, both to better understand the behaviors we see in the world and to improve our analyses of welfare and policy.

Some “standard” economic assumptions:

- People treat gains and losses symmetrically.
- People behave exactly as they plan.
- People care only about themselves (pure self-interest).
- People are Bayesian information processors.
- People behave in their own best interests.

Starting point for behavioral economics:

- Evidence from psychology casts doubt on all of these (and other) “standard” assumptions.

What is “behavioral economics”? (cont)

Goal of behavioral economics:

- Incorporate insights from psychology to do better economics!
- E.g., perhaps we can better understand savings-consumption behavior, or labor-market behavior, or the consumption of addictive products, or other economic behaviors if we let our analyses be guided by insights from psychology and related fields.

A closely related field: “decision research” (or judgment & decision making):

- Behavioral decision research attempts **to develop** descriptively accurate models of human judgment and human decision making.
- Behavioral economics attempts **to apply** these models (or simplified versions) to do better economics.

No bright lines between these two fields!

This Course Is Not

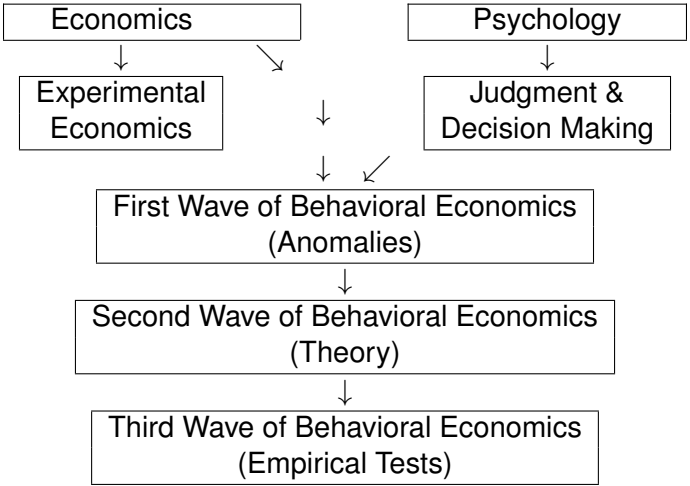
- Psychology taught by an economist.
  - Again, the goal is to incorporate insights from psychology to do better economics.

    $\Longrightarrow$ Major focus on economic methodology.

    $\Longrightarrow$ Benchmark is standard economic model.

- Behavioral finance.
  - We will not spend any time talking about determination of asset prices.
  - Don't ask me how to invest. (Okay, I'll tell you. Buy low-cost index funds and forget about them for a long time.)
  - But we will occasionally discuss implications of behavioral phenomena for how people make financial decisions.

Evolution of Behavioral Economics



Some Prominent Names

Two psychologists who initiated the field of judgment & decision making:

- Daniel Kahneman & Amos Tversky

The first behavioral economist:

- Richard Thaler

  ...the real first: Herbert Simon

  ...the real real first: Adam Smith

Some influential experimental economists:

- Vernon Smith, Charlie Plott, Al Roth

Some early prominent behavioral economists:

- George Akerlof, Robert Frank, George Loewenstein, Matthew Rabin, Colin Camerer, Ernst Fehr, David Laibson

Current-gen prominent behavioral economists:

- Nava Ashraf, Botond Koszegi, Stefano DellaVigna, Ulrike Malmendier, Devin Pope, Nick Barberis, Supreet Kaur, Dmitry Taubinsky, Justin Sydnor, Josh Schwartzstein, many many others!

The Typical Arc for Each Topic

- Review/learn the “standard model”.
- Discuss evidence that contradicts the “standard model”.
  - “anomalies”: behaviors that are inconsistent with “standard model”.
  - Use experiments in class to demonstrate “anomalies”
- Develop an alternative model motivated by that evidence.
- Investigate the predictions of that alternative model for economic applications.
- Discuss empirical tests of these predictions (when such tests exist).

We'll Use Many Methodologies

First, two forms of "theory":

- Abstract theory: Define a stylized abstract environment, and analyze what models of decision making predict in that environment.

- Applied theory: Use abstract theory to analyze a real-world economic field context (an "application").

  Abstract theory typically has three stages:

  - Stage 1: Translate a complex field context into a stylized abstract environment (often loose and imprecise, and requires good judgment and intuition).
  - Stage 2: Analyze that stylized abstract environment as we would in abstract theory (super precise).
  - Stage 3: Relate the results back to the field context — assess what we have learned, and robustness to different decisions at stage 1.

Theories in Economics

Some comments on theories:

- No theory is intended to be a complete and accurate representation of the world — rather, theories are meant to be simple representations of the world designed to help us better understand the world.
- Theory are seldom proven “correct” — we can only assess the usefulness of a particular theory, or compare the usefulness of two theories, in helping us to understand the world.

Theories in Economics

Models in economics must trade off competing aims. No social science model achieves all of the desirable goals (listed below). Thus the science is augmented with a little “art”.

(Adapted from Gabaix and Laibson 2008)

1. Parsimony
2. Tractability
3. Conceptual insightfulness
4. Generalizability (portability)
5. Falsifiability
6. Empirical accuracy
7. Predictive precision

We'll Use Many Methodologies

Next, two forms of "empirical" analysis:

- Analysis of experimental data.
  - An aside on experiments in class:
    - Randomly occurring based on my whims / boredom
    - Always voluntary
    - Always use real money (mine, so come to class!)
    - Almost always fun
- Analysis of field data.

Finally, policy analysis — behavioral economics is perhaps most important for its welfare implications.

- Given time constraints, this last topic will suffer.

The Revealed-Preference Approach

We observe people's choices, and investigate what can we infer about their preferences from those choices.

Two implicit features:

- We cannot ask people **how** they make their choices.
- The preferences that we infer from choices can be used for welfare analysis (and policy analysis).