

# Introduction to Behavioral Economics

EC404; Fall 2021

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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?

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*.

Or, following the slightly-more-modern credo of Ted Lasso:

*Be curious, not judgemental.*

Everything is posted on a course website: [ec404.netlify.app](https://ec404.netlify.app)

Yes, I am aware this is the dumbest URL of all time.

The syllabus is there. Don't open it now. Read it later -- it's long.

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

## Syllabus highlights:

- Grade is composed of problem sets, exams, and a written assignment.
  - Problem Sets: 30%
  - Exams: 60%
  - Writing Assignment: 10%
- Exams will follow from and extend problem sets.
- Writing assignment will be straightforward, I promise.
  - (Writing assignment fulfills MSU requirement for Tier II writing)

## The Course In One (Frightening) Line

I teach using "math".

...Don't be afraid. The math won't bite you.

## Why do I do this?

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 (you have to be open-minded to learning ideas through the lens of mathematics).

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*.

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, more importantly, the material is best understood by frequently, deeply engaging with the subject matter.



What this means concretely: 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 2020:

The difficulty of the class was a bit ridiculous. Prof. was reasonable grading HW assignments and writing assignments but would make exams significantly different than other example problems. Literally stated before the exam "you can use 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 more positive)

If you are concerned about the style or substance of this course, please come talk to me.

## **I hate grading.**

Nevertheless, it is a part of the college experience.

A note on grades:

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

- "Standard" cutoffs apply
  - above 92% → 4.0
  - 87-92% → 3.5
  - 82-97% → 3.0
  - 77-82% → 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.

Because this is a new-ish course:

- Some of the lectures might 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 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.

Your "assignment": read syllabus.

Things to stress from syllabus:

- E-mail is the best way to contact me, but please compose your email in a clear way.
- No appointments necessary for regularly scheduled office hours (Thurs, 3:15 - 4:30).
- Can only reschedule exams (with good reason) if you tell me *\*before\** the exam.
- Notify me immediately if you need accommodations because of RCPD or religious convictions.

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

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 assigned, ask me and I'll let you know why I'm forcing you to struggle through it.

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.

We're here to understand the economic outcomes that we observe in the world, and to design policies to improve those outcomes.

**Our (specific) 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 short, 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.

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: "behavioral decision research" (also known as judgement and 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!



Two things this course is **NOT**:

- Psychology taught by an economist.
  - Again, the goal is to incorporate insights from psychology to do better **economics**.
- ⇒ Major focus on economic methodology.
- ⇒ 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.

## Some Prominent Names

Two psychologists 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

## More Prominent Names

Some early prominent behavioral economists:

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

Current-gen prominent behavioral economists:

- Nava Ashraf, Botond Koszegi, Stefano DellaVigna, Ulrike Malmendier, Nick Barberis.

Current up-and-comers → Future leaders:

- Supreet Kaur, Dmitry Taubinsky, Justin Sydnor, Josh Schwartzstein, many others!

- Review/learn the "standard model".
- Discuss evidence that contradicts the standard model
  - "anomalies" : behaviors that are inconsistent with the 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).

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").

Applied 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.

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.
- Models in economics must trade off competing aims, and the science is augmented with a little "art". Goals include:
  - Parsimony
  - Tractability
  - Conceptual insightfulness
  - Generalizability (portability)
  - Falsifiability
  - Empirical accuracy

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.
- Policy analysis --- behavioral economics is perhaps most important for its welfare implications.

Given time constraints, this last topic will suffer.

You've made it to the end of the introduction.

This class will be fun. Probably. Maybe. Hopefully?