Econ 119: Psychology and Economics
Summer 2021

Instructor, Readers, and Meetings

Instructor:	Jim Campbell (He/His)
Email:	jamescampbell@berkeley.edu
Class day/time:	10am-12pm M, Tu, W, Th
Class location:	Zoom link (password: econ119)
Office hours:	12:30-2pm Thursdays
Office hours link:	Zoom link (password: econ119)

Reader information: Please see the "Reader information" Page in bCourses for contact information for the Readers, and times and Zoom links for Reader office hours.

Enrollment: All enrollment questions should be directed to the Head GSI in the Economics Department (headgsi@econ.berkeley.edu)

Note on Online Format

Welcome to Psychology and Economics! Due to the impact of COVID-19 all summer courses at Berkeley are online this year. For this course I will be holding class online at the times we were scheduled to have our in-person meetings. These live classes will include lecture-style presentation of the material, group discussions of readings, supervised work on group and individual projects, participation in experiments, and demonstration of practice problems.

However, attendance at the live class is not required, and you will be able to take and fully participate in this class without having to be online at any set time. The live classes will be recorded and available for you to view whenever you choose, and I will be available for office hours and consultations at set times and by appointment. Group project work and discussions can be arranged by you and your fellow students in any mutually convenient way that respects the fact that we all have different schedules and constraints.

In short, you will be able to succeed in this course whether or not you attend the live classes. I will frequently communicate my expectations for what work you should be doing to stay on track. Please contact me at any time if you feel that you could use extra clarity, flexibility, or support.

Course Description and Objectives

In this course we will study how psychological evidence contradicts and complicates the assumptions and applications of standard economic theory. We will learn and discuss the ways that evidence on individual and group decision-making can be incorporated into tractable economic models. In order to practice doing behavioural economics, we will critically analyse experimental methods and findings from the established literature and design novel experiments of our own. Along the way we will figure out how psychology has fit in over the years to the history of the discipline of economics.

I have three objectives for the course. By the end of our time together, I would like you to be able to:
1. Describe, discuss, and critically evaluate some of the most important findings and methods in the field of behavioural economics. *[SP1,CS1,CS2,QT1,QT2,QT3,QT4]*
2. Use behavioural economic models by solving simple numerical and parameterized examples and learning how to embed them in larger models or empirical analyses. *[PS1,PS2]*
3. Design your own economics experiments or theoretical models that are capable of narrowly identifying aspects of behaviour that are relevant to economic settings. *[SP1,CS1]*

Below in the assessment and grading section I will describe how I hope to assess how well you have achieved these goals. *[Parentheses relate my course objectives to the Economics Department's learning goals for the Economics major.]*

Please ask questions both in class and in your work. Asking questions helps us all to follow what's going on and is a great way to help you think things through and come up with new ideas!

Textbook and Readings

There is no required textbook for the course and all the materials you will need are free to you. All required and optional readings will be linked from the reading list.

Evaluation and Grading

Your grade will be determined by your responses to required readings (15%), analysis of a paper from the reading list (15%), your own proposed economic experiment (30%), and two exams (40%). The proposed experiment is a group assignment. I will enter the course with the mindset that 90-100 is the A range, 80-90 is the B range, and so on, but these grade bins are often lowered later as I see scores come in and reflect on how scores are mapping to the learning goals for the course. I'll update you on this periodically.

For each topic we'll have homework that is not for grade but will serve as your primary preparation for the exams. The exams and homeworks will consist of mathematical problems and short answer or short essay questions, designed to test your mastery of the techniques, knowledge, and concepts we develop in class and on the homeworks and your ability to apply them to novel situations. Exam responses will be

graded for accuracy using a "holistic grading" rubric that focuses on how well we think you've grasped the material and how accurately you've been able to apply it.

Responses to readings will be a short single paragraph response to one required reading for each of our six topics. In the reading responses I would like you to write about what in the readings raised questions for you, interested you, or was confusing to you, as opposed to just a summary of the material. This will give us all at least one common point of reference to anchor our understanding of each topic.

Around halfway through our course I will have you work in a group to select an economics experiment of your choice (this can be on or off the reading list) and write a report on it---how was it done, why the authors made the choices they made, in what ways could it have been extended, what exactly we learn from it, and so on.

In the last week of our course you and your group will submit a proposal for a novel economics experiment or, with special permission, a proposal and sketch of a theoretical model or an empirical project.

We will devote plenty of time to matching you with others with similar interests and to doing work on the projects under my supervision. To the extent possible with our online format I will try to facilitate constructive peer criticism among different groups to give you another perspective on your project. If time permits you will have the opportunity to briefly describe your proposal for the rest of the class during our last week.

More detailed descriptions and provisional due dates for all of the assessments can be found on the reading list document and on the bCourses site. They are all subject to change depending on how the course progresses.

Academic Integrity

Please be honest in your work for our class. The Honor Code adopted by the UC Berkeley student community says "[a]s a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." I expect you to hold up that commitment. If you're worried about how the class is going for you, come and talk to me about it. I am always happy to work with you to help you to succeed.

To give two important examples, drawing from the Division of Student Affairs' Academic Integrity website (https://sa.berkeley.edu/conduct/integrity): you must always identify original sources, words, or ideas that you use in your work, and you must submit your own individual and original work for individual assignments or the original work of your group collaboratively for group assignments. If you need guidance about my expectations about academic integrity in any situation, please ask.

This is particularly relevant under remote learning since everything will be online. You may absolutely not share or discuss any exam questions or answers with anyone else for any reason until after the window to take the assessment has closed. The timed assessments are open note, but using outside sources like websites during the exam is not allowed. All work on the exams must be your own, unassisted by anyone else. It's extremely important to me that the assessments reflect your knowledge and understanding and no-one else's, and to be fair to students who are honest in their work, evidence of cheating will be dealt with harshly. Cheating on an exam or other assignment will result in an F for the course, and cheating will be reported to the Center for Student Conduct.

Course Policies

There are no formal attendance requirements for the class. You may attend the live Zoom classes as you wish. Of course, it is extremely important that you keep up with the course progression---that includes participating in group work and submitting required assessments on time.

I will use email (archived on bCourses) to contact you when necessary with class news or announcements.

On your workload: I expect you to work at least a couple of hours per class hour. This means reading and taking notes, responding to assignments, working with your group on projects, and reviewing material.

Tips for Productive Learning in this Class

- When reading a paper, listening to an explanation about a paper, or discussing material with a group, take notes. Note-taking is the best way to help you remember the ideas you had at the time!
- Take notes strategically to support your assignments. Jot down project ideas, criticisms of the material, connections to other topics in the course or knowledge that you have, questions for me or your fellow students, and so on.
- Early on, practice skimming papers for their general ideas and approach. When you find a particular paper or idea that really grabs you, dive deeper into it to really understand it. This goes double for "review of the literature" style articles. There is a long reading list in this course and it barely scratches the surface---don't be afraid to read broadly and shallowly sometimes, and narrowly and deeply sometimes. Let your interests and instincts guide you.
- Always try a problem for yourself for a little while, but never try a problem by yourself for too long. If you've given it a shot and are really stuck, ask me or your classmates. It is totally normal not to "get it" a lot of the time.
- Google Scholar is your friend. We will talk as a group about how to use it productively!

Academic Support

The Student Learning Center (https://slc.berkeley.edu/economics) is a great resource to help you when you feel you may benefit from academic support. Students who may require academic accommodations should make the necessary arrangements as soon as possible. I strongly encourage anyone who feels they need such accommodations to work with the relevant office to get the support you need so that you can put yourself in the best position to succeed. The Academic Accommodations Hub (https://evcp.berkeley.edu/programs-resources/academic-accommodations-hub) can guide you.

Limits to Confidentiality

As University of California employees, all course instructors and tutors are "Responsible Employees". This means that we are required to report incidents of sexual violence, sexual harassment, or other conduct prohibited by university policy to the Title IX officer---we cannot keep reports of sexual harassment or sexual violence confidential. However, the Title IX officer will consider requests for confidentiality after an incident has been reported. Confidential resources are available, including the PATH to Care Center (http://sa.berkeley.edu/dean/confidential-care-advocate), which serves survivors of sexual violence and sexual harassment.

Topics Outline

1. Choice

Why do we choose what we choose? Standard economic theory models us as if we simply choose what we most prefer of the options that are available. Evidence shows us that things are a little more complicated than that.

In this section we will introduce the key assumptions and modeling approach of traditional choice theory, and then investigate evidence for how people actually go about choosing things. Some of the things we highlight here will show up again and again throughout the course, so we will also take a look at some overviews and taxonomies of what the field of behavioral economics is all about.

> *Preferences, utility, and optimal choice; consistency conditions for rational choice; reference points; the endowment effect; status quo bias; framing effects; the attraction and compromise effects; satisficing; bounded rationality; choice overload; multiple selves*

2. Time

How is sooner different from later? Some of our decisions have repercussions, and sometimes we have to decide things now but live with the consequences afterwards.

In this section we will learn how economists try to figure out how patient or impatient a person is. We will see how things like procrastination and temptation can be modeled, what happens when a person is time inconsistent, and how institutions and policy might be able to help protect people from their future selves.

> *Intertemporal choice; preference reversals; time inconsistency; procrastination; exponential discounting; quasi-hyperbolic discounting; the beta-delta model; sophistication and naivety; commitment devices; subadditive discounting; temptation; choice from menus; willpower; habit formation*

3. Risk

What does it mean to choose the right thing when you don't even know what the consequences will be? The world is a risky place and so economics needs to understand what kinds of decisions people make before the dice are rolled.

In this section we will discuss the history and mechanics of the canonical model of Expected Utility Theory, see where experiments have revealed its weak points, and what we can do to shore it up or replace it entirely. We will learn how to measure someone's attitude towards risk and why it matters both in economics experiments and the economy.

> *Expected Utility Theory; the St. Petersburg paradox; risk aversion; loss aversion; the Allais paradox; the Ellsberg paradox; subjective Expected Utility; maxmin Expected Utility; Prospect Theory; the certainty effect; the reflection effect; stochastic dominance; probability weighting*

4. Games

How do people behave in strategic situations? When my payoff depends not only on my choice but also on other peoples' choices, I have to consider how they think... and how they think I think, and so on. This is the object of study in the field of game theory.

Here we will look at some ways in which people systematically deviate from the `standard' predictions of game theory.

> *Level-k reasoning; guessing games; hide-and-seek; the beauty contest; the 11-20 game; magical coordination; salience; backward induction; the centipede; the race to 100; the chainstore paradox; repeated games; reputation and enforcement; collusion; punishment strategies; the Folk Theorem*

5. Fairness

What if people care about others and not just themselves? Altruism and generosity, spite and punishment, envy and imitation: we live in a society, and so our feelings and our choices look naturally towards the people around us.

We will look at some of the key types of experiment that reveal social attitudes, including trust games, public goods contribution games, and the ultimatum game. We will study models of people who dislike inequality, who protect their friends, or want to fit in.

> *The ultimatum game; the dictator game; public goods contribution games; free-riding; trust games; other-regarding preferences; gift exchange; warm glow altruism; extrinsic and intrinsic motivation; peer pressure; information cascades; social signaling; sanctions and ostracism; Fehr-Schmidt inequality aversion; redistribution; cooperation*

6. Belief

What happens when new information comes to light? The gold standard of Bayes's Rule is not often a good match for the messy ways that humans process news and form their opinions. The cold, hard math of probability theory can expose the ways in which our brains play tricks on us when we try to understand the world.

In this section we will see evidence on how people learn and respond to what other people do and what they see in the world. Conspiracy theories, willful ignorance, stubbornness, and gullibility are all on the table. We will also explore in more depth whether we even really understand ourselves. Are even our beliefs about our own selves irredeemably flawed?

> *Bayes's rule; the Monty Hall problem; the gambler's fallacy; hot hands; randomization; learning; reward prediction error; overconfidence; overprecision; motivated reasoning; correlation neglect; persuasion; the conjunction effect; portioning probability; conspiracy theories; polarization*