Syllabus for Current Economics Problems (ECON 434) - Fall 2023-24

Professor: Nicolas Ajzenman
Email: nicolas.ajzenman@mcgill.ca **(Please see my e-mail policy below)**
coming: https://calendly.com/nicolas-ajzenman/office-hourse)
Required and Optional Course Material: see below
TA: Yarina You (yuanru.you@mail.mcgill.ca). Office Hours: Tuesday 9 to 11 AM by zoom (she'll send the link)
Evaluation and Grading: see below

Prerequisites: ECON 230 or ECON 250. **Corequisite:** ECON 330 or ECON 352. Besides formal requirements, I strongly recommend students have a solid grasp of microeconomic theory (I will assume students know intermediate micro level). Knowledge of statistics and econometrics is also needed. I will give four classes crash course on causal inference at the beginning of the term.

Description: Standard economic models usually assume that agents are perfectly rational. In many cases, however, experimental evidence suggests that such assumptions might not be valid. In Behavioral Economics, some assumptions from standard models are replaced by alternative assumptions based on psychological research. The goal then is to understand how behavioral biases affect individual behavior, and what are the implications of such behavioral biases for the workings of markets and policy. It is important to note that we continue to employ mainstream economic methods. We just incorporate in the models' assumptions that are more in line with the experimental evidence.

E-mail policy: Short e-mails that can be answered by a yes or a no are more likely to be answered quickly. Long e-mails or e-mails requiring long responses may or may not be answered. If your question is long or requires a complex answer, please go to see the TA or the professor during office hours.

MyCourses:

- This course utilizes MyCourses for course management and posting of relevant materials. Please check the website on a regular basis for announcements. It is your responsibility to stay well-informed of course management and announcements on MyCourses.
- Check myCourses regularly in case of announcements or materials, prior to lectures.
- Assignments and projects must be uploaded to myCourses

Class by class calendar

Date	Topic	Type	Code [#]
1 Sep	Introduction	Lecture	1
	Causal Inference	Lecture	4
8 Sep	Causal Inference	Lecture	5
	Causal Inference	Lecture	6
14 Sep	Time inconsistency	Lecture	7
	Defaults	Lecture	8
22 Sep	Time inconsistency	Stud. Presentation	9
	Prospect Theory	Lecture	10
19 Sep	Prospect Theory	Lecture	11
	Prospect Theory	Lecture	12
13 Oct	Social Preferences	Lecture	13
	Social Preferences	Lecture	14
20 Oct	Social Preferences	Lecture	15
	Non-standard beliefs	Lecture	16
27 Oct	Misperceptions	Stud. Presentation	17
	Misperceptions	Stud. Presentation	18
3 Nov	Attention/Salience	Lecture	19
	Salience	Lecture	20
10 Nov	**Group Presentation**	**Group Presentation**	**21**
	Group Presentation	**Group Presentation**	**22**
17 Nov	Complexity/Psych. Frictions	Lecture	23
	Psych. Frictions	Stud. Presentation	24
24 Nov	Intrinsic/Extrinsic motivations	Stud. Presentation	25
	Poverty and Decision-making	Stud. Presentation	26
1 Dec	Corruption and Social Norms	Lecture	27
	System 1, System 2	Lecture	28

GROUP PROJECT SUBMISSION DEADLINE: see below.

Topics [codes: #]

- Introduction: 1 class [#1]
    - What is behavioral economics? Why do we mean by rationality? What is a bias or an anomaly? Three types of anomalies (preferences, beliefs and decision-making), Nudges, Three types of behavioral papers (identifying anomalies, updating our theoretical toolbox, testing behavior).

      Readings

- *DellaVigna, S. (2009). Psychology and economics: Evidence from the field. Journal of Economic literature, 47 (2), 315–72. [only the part referred to the topic of this lecture]
- Thaler, Richard H., and Cass R. Sunstein. Nudge: Improving decisions about health, wealth, and happiness. Yale University Press, 2008

- Pre-requisites: notions of causality in economics: 4 classes [#2, 3, 4, 5]

- Lectures: 15 classes. **NOTE**: if a class ends up being shorter than expected we'll start with the next lecture. If a class ends up being longer, we'll take part of the following lecture to finish.

    - Non-standard preferences:
        - Time-inconsistent preferences, Present Bias, Self-Control, Commitment (2 class) [#7]

          Readings (time inconsistent preferences):

- *DellaVigna, S. (2009). Psychology and economics: Evidence from the field. Journal of Economic literature, 47 (2), 315–72. [only the part referred to the topic of this lecture]
- *Time discounting and time preference: A critical review. Journal of Economic Literature, 2002, 40 (2), 351–401. [sections I to V]
- O'Donoghue, T., & Rabin, M. (2001). Choice and procrastination. The Quarterly Journal of Economics, 116 (1), 121–160.
- Phelps, E., & Pollack, R. (1968). Myopia and inconsistency in dynamic utility maximization. The Review of Economic Studies, 23, 165–180.
- Samuelson, P. A. (1937). A note on measurement of utility. The review of economic studies, 4 (2), 155–161

          Readings (commitment):

- *Ashraf, N., Karlan, D., & Yin, W. (2006). Tying odysseus to the mast: Evidence from a commitment savings product in the philippines. The Quarterly Journal of Economics, 121 (2), 635–672
- *Giné, X., Karlan, D., & Zinman, J. (2010). Put your money where your butt is: a commitment contract for smoking cessation. American Economic Journal: Applied Economics, 2 (4), 213–35.
- Ariely, D., & Wertenbroch, K. (2002). Procrastination, deadlines, and performance: Self-control by precommitment. Psychological science, 13 (3), 219–224
- DellaVigna, S., & Malmendier, U. (2006). Paying not to go to the gym. American Economic Review , 96 (3), 694–719.
- Gruber, J. H., & Mullainathan, S. (2005). Do cigarette taxes make smokers happier. The BE Journal of Economic Analysis & Policy, 5 (1).
- Thaler, R. H., & Benartzi, S. (2004). Save more tomorrow™: Using behavioral economics to increase employee saving. Journal of political Economy, 112 (S1), S164–S187.

        - Defaults (1 class) [#8]

          Readings:

- *DellaVigna, S. (2009). Psychology and economics: Evidence from the field. Journal of Economic literature, 47 (2), 315–72. [only the part referred to the topic of this lecture]
- *Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401 (k) participation and savings behavior. The Quarterly journal of economics, 116 (4), 1149–1187
- Haggag, Kareem, and Giovanni Paci. "Default tips." American Economic Journal: Applied Economics 6.3 (2014): 1-19.
- Carroll, G. D., Choi, J. J., Laibson, D., Madrian, B. C., & Metrick, A. (2009). Optimal defaults and active decisions. The quarterly journal of economics, 124(4), 1639-1674.
- Blumenstock, Joshua, Michael Callen, and Tarek Ghani. 2018. "Why Do Defaults Affect Behavior? Experimental Evidence from Afghanistan." American Economic Review, 108 (10): 2868-2901.
- O'Donoghue, T., & Rabin, M. (2001). Choice and procrastination. The Quarterly Journal of Economics, 116 (1), 121–160.
- Ebeling, F., & Lotz, S. (2015). Domestic uptake of green energy promoted by opt-out tariffs. Nature Climate Change, 5(9), 868-871.

▪ Prospect Theory/Loss Aversion/Endowment Effect (3 classes)

Readings (class 1, theory) [#10]

- * Kahneman, Daniel, and Amos Tversky (1979) "Prospect Theory: An Analysis of Decision under Risk", Econometrica, XLVII (1979), 263-291.
- *Kahneman, Daniel, Jack L. Knetsch, and Richard Thaler (1990), "Experimental Tests of the Endowment Effect and the Coase Theorem," Journal of Political Economy, December 1990, 98, 1325–1348.
- Thaler, R. (1980). Toward a positive theory of consumer choice. Journal of economic behavior & organization, 1 (1), 39–60.

Readings (class 2, applications: finance, labor) [#11]

- * Camerer, C., Babcock, L., Loewenstein, G., & Thaler, R. (1997). Labor supply of new york city cabdrivers: One day at a time. The Quarterly Journal of Economics, 112 (2), 407–441.
- *Thaler, R. H., Tversky, A., Kahneman, D., & Schwartz, A. (1997). The effect of myopia and loss aversion on risk taking: An experimental test. The quarterly journal of economics, 112 (2), 647–661.
- Odean, T. (1998). Are investors reluctant to realize their losses? The Journal of finance, 53 (5), 1775–1798.

Readings (class 3, applications: education, sports, environmental and housing) [#12]

- * Fryer, R. G., Levitt, S. D., List, J., Sadoff, S., et al. (2012). Enhancing the efficacy of teacher incentives through loss aversion: A field experiment (Tech. Rep.). National Bureau of Economic Research.
- * Homonoff, Tatiana A. 2018. "Can Small Incentives Have Large Effects? The Impact of Taxes versus Bonuses on Disposable Bag Use." American Economic Journal: Economic Policy, 10 (4): 177-210.

- Pope, Devin G., and Maurice E. Schweitzer. "Is Tiger Woods loss averse? Persistent bias in the face of experience, competition, and high stakes." The American Economic Review 101.1 (2011): 129-157.
- Genesove, D., & Mayer, C. (2001). Loss aversion and seller behavior: Evidence from the housing market. The quarterly journal of economics, 116(4), 1233-1260.

    - Social Preferences (3 classes)

      Readings (classes 1 and 2, introduction and applications) [#13, 14]

- * "Anomalies: cooperation," Journal of economic perspectives, 1988, 2 (3), 187–197
- * Kube, S., Maréchal, M. A., & Puppe, C. (2013). Do wage cuts damage work morale? evidence from a natural field experiment. Journal of the European Economic Association, 11 (4), 853–870.
- * Bandiera, O., Barankay, I., & Rasul, I. (2005). Social preferences and the response to incentives: Evidence from personnel data. The Quarterly Journal of Economics, 120 (3), 917–962.
- Kessler, J. B., & Milkman, K. L. (2018). Identity in charitable giving. Management Science, 64(2), 845-859.
- Gneezy, U., & List, J. A. (2006). Putting behavioral economics to work: Testing for gift exchange in labor markets using field experiments. Econometrica, 74(5), 1365-1384.
- Crumpler, H., & Grossman, P. J. (2008). An experimental test of warm glow giving. Journal of public Economics, 92 (5-6), 1011–1021.

      Readings (class 3, charitable giving, preferences for redistribution) [#15]

- * Fisman, R., Kuziemko, I., & Vannutelli, S. (2021). Distributional preferences in larger groups: Keeping up with the joneses and keeping track of the tails. Journal of the European Economic Association, 19 (2), 1407–1438.
- *DellaVigna, S., List, J. A., & Malmendier, U. (2012). Testing for altruism and social pressure in charitable giving. The quarterly journal of economics, 127 (1), 1–56.
- Andreoni, J., Rao, J. M., & Trachtman, H. (2017). Avoiding the ask: A field experiment on altruism, empathy, and charitable giving. Journal of political Economy, 125(3), 625-653.
- Eckel, C. C., Herberich, D. H., & Meer, J. (2016). It's not the thought that counts: A field experiment on gift exchange and giving at a public university (No. w22867). National Bureau of Economic Research.
- Cruces, G., Perez-Truglia, R., & Tetaz, M. (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. Journal of Public Economics, 98, 100-112.
- Falk, A. (2007). Gift Exchange in the Field. Econometrica, 75(5), 1501-1511

- Non-standard beliefs:
    - Projection Bias/Overconfidence/LSM/Base-rate neglect (1 class) [#16]

      Readings

- *DellaVigna, S. (2009). Psychology and economics: Evidence from the field. Journal of Economic literature, 47 (2), 315–72. [only the part referred to the topic of this lecture]
- *Busse, M. R., Pope, D. G., Pope, J. C., & Silva-Risso, J. (2012). Projection bias in the car and housing markets (Tech. Rep.). National Bureau of Economic Research.
- Cruces, G., Perez-Truglia, R., & Tetaz, M. (2013). Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. Journal of Public Economics, 98, 100-112.
- Kuhn, P., Kooreman, P., Soetevent, A., & Kapteyn, A. (2011). The effects of lottery prizes on winners and their neighbors: Evidence from the Dutch postcode lottery. American Economic Review, 101(5), 2226-47.
- Chang, T. Y., Huang, W., & Wang, Y. (2018). Something in the air: Pollution and the demand for health insurance. The Review of Economic Studies, 85 (3), 1609–1634
- Conlin, M., O'Donoghue, T., & Vogelsang, T. J. (2007). Projection bias in catalog orders. American Economic Review, 97 (4), 1217–1249.
- Weinstein, N. D. (1980). Unrealistic optimism about future life events. Journal of personality and social psychology, 39(5), 806.
- Read, D., & Van Leeuwen, B. (1998). Predicting hunger: The effects of appetite and delay on choice. Organizational behavior and human decision processes, 76(2), 189-205.

- Non-standard decision-making:
  - <u>Limited attention/Salience/Left-Digit Bias/Order Effects/Complexity-simplification (3 classes)</u>

    Readings (class 1) [#19]

- *Chetty, R., Looney, A., & Kroft, K. (2009). Salience and taxation: Theory and evidence. American economic review, 99(4), 1145-77.
- Lacetera, N., Pope, D. G., & Sydnor, J. R. (2012). Heuristic thinking and limited attention in the car market. American Economic Review, 102(5), 2206-36.
- Strulov-Shlain, A. (2021). More than a Penny's Worth: Left-Digit Bias and Firm Pricing. Chicago Booth Research Paper, (19-22).
- Dallas, S. K., Liu, P. J., & Ubel, P. A. (2019). Don't count calorie labeling out: Calorie counts on the left side of menu items lead to lower calorie food choices. Journal of Consumer Psychology, 29(1), 60-69.

Readings (class 2) [#20]

- *Pope, D. G. (2009). Reacting to rankings: evidence from "America's Best Hospitals". Journal of health economics, 28(6), 1154-1165.
- *Ajzenman, N., Elacqua, G., Marotta, L., & Olsen, A. (2021). Order effects and employment decisions: Experimental evidence from a nationwide program. Working Paper
- *Ajzenman, N., & Durante, R. (2022). Salience and accountability: School infrastructure and last-minute electoral punishment. Economic Journal, forthcoming.

Readings (class 3) [#23]

- *Bettinger, E. P., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. The Quarterly Journal of Economics, 127(3), 1205-1242.

- Drexler, A., Fischer, G., & Schoar, A. (2014). Keeping it simple: Financial literacy and rules of thumb. American Economic Journal: Applied Economics, 6(2), 1-31.
- Karlan, D., McConnell, M., Mullainathan, S., & Zinman, J. (2016). Getting to the top of mind: How reminders increase saving. Management Science, 62(12), 3393-3411

- Related topics:
  - System 1 versus System 2 (1 class) [#28]

    Readings

- * Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics. American economic review, 93(5), 1449-1475.
- Ajzenman, N., Bertoni, E., Elacqua, G., Marotta, L., & Méndez Vargas, C. (2020). Altruism or money? reducing teacher sorting using behavioral strategies in peru

  - Corruption and Social norms (1 class) [#27]

    Readings

- * Ajzenman, N. (2021). The power of example: Corruption spurs corruption. American Economic Journal: Applied Economics, 13(2), 230-57.
- Gächter, S., & Schulz, J. F. (2016). Intrinsic honesty and the prevalence of rule violations across societies. Nature, 531(7595), 496-499.
- d'Adda, G., Darai, D., Pavanini, N., & Weber, R. A. (2017). Do leaders affect ethical conduct?. Journal of the European Economic Association, 15(6), 1177-1213

- Students' presentation of papers: 6 classes
  - Time-inconsistency/present-bias/commitment [#9]

    Paper to present: Royer, Heather, Mark Stehr, and Justin Sydnor. "Incentives, commitments, and habit formation in exercise: evidence from a field experiment with workers at a fortune-500 company." American Economic Journal: Applied Economics 7.3 (2015): 51-84

  - Psychological Frictions [#24]

    Paper to present: Bhargava, S., & Manoli, D. (2015). Psychological frictions and the incomplete take-up of social benefits: Evidence from an IRS field experiment. American Economic Review, 105(11), 3489-3529.

  - Misperceptions [#17]

Paper to present: Carlana, M. (2019). Implicit stereotypes: Evidence from teachers' gender bias. The Quarterly Journal of Economics, 134(3), 1163-1224.

- Misperceptions/Social Norms [#18]
  Paper to present: Bursztyn, L., González, A. L., & Yanagizawa-Drott, D. (2020). Misperceived social norms: Women working outside the home in saudi arabia. American economic review, 110(10), 2997-3029.

- Intrinsic/Extrinsic motivations [#25]
  Paper to present: Lacetera, N., Macis, M., & Slonim, R. (2012). Will there be blood? Incentives and displacement effects in pro-social behavior. American Economic Journal: Economic Policy, 4(1), 186-223.

- Poverty and decision-making [#26]
  Paper to present: Carvalho, L. S., Meier, S., & Wang, S. W. (2016). Poverty and economic decision-making: Evidence from changes in financial resources at payday. American economic review, 106(2), 260-84.

- Students' presentations of preliminary group projects: 2 classes.

Structure of Classes

The classes will be organized in four groups/types:

- **Normal lectures**: I will teach a specific topic, focused on one or two **core** papers, complemented with specific results of **ancillary** papers. You are required to read the core papers.
- **Students' presentation of policy ideas:** Each group will present their project ideas. Every student in class will give feedback. We will reserve two classes for this.
- **Students' presentations of papers**: After some of the main topics (taught during lectures), students will present a paper I will randomly assign to a group of students, which will typically be an application or extension of the main topic. Every student in class will ask questions, discuss and participate. Presentations will be conducted in groups (not the project groups).

Important: your participation will be graded in terms of quantity but especially in terms of quality. One good, thoughtful comment is much valuable than 10 trivial interventions.

Group project: a policy idea from design to testing

By the end of the second week of class (SEPTEMBER 15) you will send me a list of groups of 4 to 5 people.

Each group will write a policy research proposal and will submit (myCourses) DECEMBER 1, 5 PM Montreal time (**no late submissions allowed**).

You are an advisor for the Behavioral Economics Team of your preference (for instance, the Impact and Innovation Unit in Canada, the White House's Social and Behavioral Sciences Team in the US, Australia's Beta).[1] You are working on a project with an organization (which can be a public sector institution or an NGO, non-profit or even for-profit organization with a social purpose). Your goal is to:

- **Identify a specific problem that could be solved using insights from behavioral economics**. For instance: as shown in our report here[2], caregivers in El Salvador receive free micronutrient supplements for their children. They do not use them and thus their children suffer anemia. Why is adherence to a free (and beneficial) treatment so low?
- **Propose a set of hypotheses that you would like to test** (e.g., what are the potential anomalies or biases that you identify could be triggering an undesirable behavior). Following the previous example: caregivers could be present-biased, they could have biased perceptions of the long-term risks of anemia, or of the probability of their children suffering from anemia, they could have a wrong perception about the efficacy of micronutrients, they could be forgetful or have limited attention.
- **Propose a way of testing these hypotheses before designing an intervention.** Following the previous example: focus groups and/or structured interview with relevant stakeholders (caregivers, doctors)
- **Design one or many interventions to be implemented in order to alleviate the problem you want to solve.** Following the previous example, for instance, sending reminders to caregivers in critical junctures of the treatment process.
- **Design an experiment to test the effectiveness of the hypotheses.** Following the previous example, for instance, design a randomized trial.
- **Provide an (approximated) cost-benefit analysis**

Note: the examples above are illustrative and incomplete.

A few important points to consider:

a) **Your job is to design a proposal that is simultaneously policy-relevant and research-oriented.** That is: you need to solve a relevant problem but at the same time design an

[1] This exercise is an adaptation of Tatiana Homonoff's exercise for Behavioral Economics and Policy Design (Wagner-NYU, Fall 2019).

[2] Bernal P., Ajzenman N., Kettle S., Lopez Boo F., Iriarte E., "Designing Behaviorally Informed Health Interventions: Adherence to Micronutrient Treatment in El Salvador" (2020), Inter-American Development Bank Technical Note.

experiment which will be publishable. That means that your project should include a section explaining the policy problem and also a research proposal.

b) **You must be specific in terms of implementation**. For instance: **how** is the intervention going to be implemented, who is going to be recruited (e.g., what is the sample population). Are you going to send SMS? If so, how would you get the phone numbers? How will you know if the subjects read the messages? Are you going to change the choice architecture in an online platform? How? Is your change something that your partner will be willing to do? Is it technologically feasible? Are you going to implement a tailor-made change in electricity bills? If so, how will you access the data to create the messages?
c) **You must be careful in terms of designing the experiment**. For instance: do you have enough sample size in your context? Do you expect attrition? Of what type? Is there any chance of contamination in the treatment? If so, how would you deal with it? What are exactly the hypotheses you want to test and what you expect to find?
d) **Your proposal must be grounded in theoretical insights:** what are the biases you suspect could be driving the undesirable behavior? Why? What is the theory underlying the expected effect of your intervention?
e) **Explain how you would come up with reasonable behavioral hypotheses**: do you need to run focus groups to learn more about the target population and to do a pre-test of hypotheses? How would you do it?
f) **Be mindful about the costs** of what you plan to do. Sending a text message is cheap. Implementing a 6-week course is not.

I will not give you any sample or guidelines (only broad instructions). I want you to think by yourselves, you will have to discuss ideas with your group partners and also with other students. You will also present your project and get feedback from your classmates. You will use that feedback to improve it before the final submission.

Presentation of Preliminary Group Projects

Each group will present their main ideas to the class and will receive feedback. Each presentation will have a duration of 8 minutes (no interruptions) + 5 minutes for discussion and feedback. I will assign groups to specific dates the 2nd week of classes.

Important: you will be graded as presenters but also as participants. In other words: your feedback to your classmates' projects will be graded.

Course Assignments and Grading

- Class participation (general): 10%
- Paper presentation (includes discussion of classmates' presentations): 20% (dates in the class-by-class calendar)
- Presentation of project ideas: 30% (dates in the class-by-class calendar)
- Group Project: 40% (due date: December 1st)

Grade Criterion:

Letter	Points	Percent
A	**4**	**85-100**
A-	**3.7**	**80-84**
B+	**3.3**	**75-59**
B	**3**	**70-74**
B-	**2.7**	**65-69**
C+	**2.3**	**60-64**
C	**2**	**55-59**
D	**1**	**50-54**
F	**0**	**00-49**

The grade distribution will be approximately normal, centred around 70 – 74 percent. At the end of the course, if the distribution differs significantly, the instructor may exercise discretion and adjust the grade thresholds. This will not serve as grounds for grade appeals

Bibliography

We will not follow one specific text-book. I strongly encourage you to read Nudge[3]. For each class I will assign one or two papers (mandatory) and a list of other references that I will briefly discuss during lectures. I will borrow some results from papers that you will not find in the list of references (don't worry about those papers, they are usually too technical). Important: some of the papers in the reading list are fairly sophisticated and difficult for undergraduates. You don't need to understand all the technicalities (and in some cases you probably won't). That's OK! You do need to understand the intuition of the paper if it's a theoretical paper and the interpretation of the main results if it's empirical.

Language of Submission

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives." (Approved by Senate on 21 January 2009)

Academic Integrity

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the

[3] Thaler, Richard H., and Cass R. Sunstein. Nudge: Improving decisions about health, wealth, and happiness. Yale University Press, 2008

Code of Student Conduct and Disciplinary Procedures" (Approved by Senate on 29 January 2003) (See McGill's guide to academic honesty for more information).