

14.160: Behavioral Economics
Syllabus – Spring 2020
Mon/Wed 10:30 am to noon
[Zoom Meeting Room](https://mit.zoom.us/j/445881289) (<https://mit.zoom.us/j/445881289>)

Instructors:

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Graduate Teaching Assistant:

Pierre-Luc Vautrey

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Recitation: Fridays 11AM

Office hours: Fridays Noon

Zoom Details for Lectures, Recitations and Pierre-Luc's Office Hours:

Join Zoom Meeting here: <https://mit.zoom.us/j/445881289>

Meeting ID: 445 881 289

US : +1 646 558 8656 or +1 669 900 6833

International Numbers: <https://mit.zoom.us/j/445881289>

Course overview:

This class covers recent topics in behavioral economics, with an emphasis on empirical applications and tests. Topics include deviations from the standard neoclassical model in terms of (i) preferences (time and risk preferences, reference dependence, and social preferences), (ii) beliefs and learning (overconfidence, projection bias, and attribution bias), and (iii) decision-making (cognition, attention, framing, and persuasion), as well as (iv) market reactions to such deviations. Applications will cover a wide range of fields, including labor and public economics, industrial organization, health economics, finance, and development economics.

The main course objectives are as follows:

- 1) Obtain exposure to the frontier of empirical research in behavioral economics
- 2) Learn how to critically assess a rapidly evolving literature and how to develop novel ideas that contribute to it
- 3) Learn how to test (behavioral) economic theory using field experiments and non-experimental data
- 4) Develop and present a research proposal, as well as give feedback to others

The course is designed for first- and second-year **PhD students in economics**. It is meant to help launch students into conducting research in behavioral economics, or to incorporate behavioral economics into their research in other fields. It is complementary to 14.137 (Psychology and Economics) taught by Prof. Drazen Prelec. 14.137 focuses on the underlying psychology of many of the topics discussed in 14.160, and it covers recent advances in neuroeconomics. PhD students in the economics department may combine 14.137 and 14.160 as a minor.

We particularly welcome and encourage students working in applied fields such as labor, public, development, IO, health, etc. to take this class if they are interested in incorporating ideas and tools from behavioral economics into their research. However, we believe that the class is also well suited for theory-oriented students who are interested in learning about the wonders of applied behavioral economics.

Prerequisites for this class are 14.121 and 14.122, though MIT graduate students should be able to and are in fact encouraged to take this course in their first year, especially since this class will likely not be taught next year. If you have not taken these courses and are *not* an MIT economics PhD student, please contact the instructors regarding your participation in this course (and/or come to the first class to see whether the class is appropriate for you).

We encourage students to attend Matthew Rabin's excellent (theory-oriented) [PhD course at Harvard](#), which is for the most part complementary to 14.160. Students are also strongly encouraged to attend the [Harvard Behavioral and Experimental Economics Workshop](#).

Course requirements and grading:

Grades will be determined based on (i) weekly short memos discussing starred readings (20%), (ii) problem sets (20%), (iii) written research proposal (15%), (iv) presentation of research proposal (30%), and (v) feedback on two other students' research proposals (15%). There will be no exams.

(i) Required Readings (20%)

The evening before each class (8 pm on Sundays and Tuesdays), students are required to submit a short summary of the required readings for that day (marked with ***). Other important papers are marked with one star (*). No written responses are required for those papers. In some weeks, (e.g. the weeks of 3/9, 3/16 and 4/13), there is only one required reading, in which case they are due at 8pm on the Sunday only. Late submissions will not be accepted.

The summaries should cover the following: (i) Why is the paper important (or why not)? (ii) An overview of the core contributions of the paper (iii) Any questions you have about the paper (optional). (iv) Any additional ideas that you might want to pursue on this topic (optional).

(ii) Problem Sets (20%)

There will be up to four (bi-weekly) problems sets. The problem sets are designed, in part, to help you flex your research muscles.

(iii) Written Research Proposal (20%)

Students will write a short research proposal on a topic related to the themes of the class. By then, and ideally earlier, you must have met one of the instructors in office hours to discuss your idea for the research proposal. We can help you choose between ideas if necessary.

(iv) Presentation (20%)

During the last lecture date (May 11), students will present their proposal on Zoom for about 20 minutes each. We will grade both the quality of the presentation and the content the proposal. If you prefer not to present, you can submit a revised version of your proposal (based on your fellow students' comments), in which case the revised proposal will count for 20% of your grade.

(v) Feedback on Other Students' Research Proposals (20%):

You will write 1-2 page written feedback to the proposal and presentation of two different students. Please write 1-2 pages of feedback to the proposal/ presentation, with focus on suggestions for improvements. Please also include brief summary what you found would be the main contributions of the project, as well as the proposals' limitations. Please note that the substance of comments will be more important than the length. For proposal and presentation, please make brief comments on how they could have written/presented more effectively. Your feedback to the proposal and presentation will each count 10% of the grade.

Timeline:

- (1) Talk to either Abhijit or Frank at least once about your proposal before spring break.
- (2) Submit your proposal by April 15
- (3) Submit your feedback responses by April 29
- (4) Submit your revised proposal by May 11

Collapsed (tentative) course outline:

Date	#	Who teaches?	Topic
Mon 2/3	1	Frank	Intro
Wed 2/5	2	Frank	Default Effects
Mon 2/10	3	Frank	Time Preferences I
Wed 2/12	4	Frank	Time Preferences II
Tues 2/18	5	Frank	Time Preferences III
Wed 2/19	6	Leo	Social Preferences I
Mon 2/24	7	Frank	Social Preferences II
Wed 2/26	8	Leo	Social Preferences III
Mon 3/2	9	Abhijit	Social Preferences IV
Wed 3/4	10	Abhijit	Social Preferences V
Mon 3/9	11	Abhijit	Risk Preferences and Reference-Dependence
Wed 3/11	12	Abhijit	Risk Preferences and Reference-Dependence
Week off – Moving to Remote teaching Spring Break			
Mon 3/30	13	Abhijit	Learning
Wed 4/1	14	Abhijit	Learning
Mon 4/6	15	Frank	Behavioral Development
Wed 4/8	16	Abhijit	Poverty
Mon 4/13	17	Hunt	Behavioral Public I
Wed 4/15	18	Hunt	Behavioral Public II
Mon 4/20			No class – Patriots' Day
Wed 4/22	19	Abhijit	Behavioral IO
Mon 4/27	20	Abhijit	Behavioral IO
Wed 4/29	21	Leo	Gender
Mon 5/4	22	Frank	Sleep and Mental Health
Wed 5/6	23	Frank	Psychology for Economists
Mon 5/11	23	A+F	Presentations of proposals

COURSE READINGS

Below is a tentative reading list for this course. We will almost certainly make some changes to this list, but they broad structure and the majority of papers will remain fairly similar to the below list.

There is no textbook for the course. Starred readings (***) are required, and you are required to read these papers before class and submit a brief write-up on each starred reading as described above.

General readings:

Overview articles

DellaVigna, Stefano. 2009. "Psychology and Economics: Evidence from the Field." *Journal of Economic Literature* 47(2): 315-372.

Rabin, Matthew. 1998. "Psychology and Economics." *Journal of Economic Literature* 36(1): 11-46.

Rabin, Matthew. 2002. "A Perspective on Psychology and Economics." *UC Berkeley Economics Working Paper No. E02-313*.

Rabin, Matthew. 2013. "Incorporating Limited Rationality into Economics." *Journal of Economic Literature* 51(2): 528-543.

Mullainathan, Sendhil and Richard H. Thaler. 2000. "Behavioral Economics." *NBER Working Paper No. 7948*.

Books (not compulsory)

Kahneman, Daniel, Paul Slovic, and Amos Tversky (eds.). 1982. *Judgment Under Uncertainty: Heuristics and Biases*, Cambridge University Press.

Kahneman, Daniel and Amos Tversky (eds.). 2000. *Choices, Values and Frames*, New York: Russell Sage Foundation: Cambridge University Press.

Ross, Lee and Richard E. Nisbett. 1991. *The Person and the Situation: Perspectives of Social Psychology*, Philadelphia: Temple University Press.

Cialdini, Robert B. 1993. *Influence, the Psychology of Persuasion*, New York: William Morrow Publishing Co.

Kahneman, Daniel. 2011. *Thinking, Fast and Slow*, New York: Farrar, Straus and Giroux.

Bazerman, Max and Don Moore. 2012. *Judgment in Managerial Decision Making* (8th Edition), John Wiley & Sons.

Lecture 1: Introduction and Default Effects

(No write-ups due on starred readings this week)

***Rabin, Matthew. 2002. "A Perspective on Psychology and Economics." *UC Berkeley Economics Working Paper No. E02-313*.

***DellaVigna, Stefano. 2009. "Psychology and Economics: Evidence from the Field." *Journal of Economic Literature* 47(2): 315-372.

Lecture 2: Default Effects

Madrian, Brigitte C., and Dennis F. Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." *Quarterly Journal of Economics* 116(4): 1149-1187.

Carroll, Gabriel D., James J. Choi, David Laibson, Brigitte C. Madrian, and Andrew Metrick. 2009. "Optimal Defaults and Active Decisions." *Quarterly Journal of Economics* 124(4): 1639-1674.

Chetty, Raj, John N. Friedman, Soren Leth-Petersen, Torben Heien Nielsen, and Tore Olsen. 2014. "Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts." *Quarterly Journal of Economics* 129(3): 1141-1219.

Thaler, Richard H. and Shlomo Benartzi. 2004. "Save More Tomorrow™: Using Behavioral Economics to Increase Employee Saving." *Journal of Political Economy* 112(S1): S164-187.

Brown, Jeffrey and Alessandro Previtro. 2014. "Procrastination, Present-Biased Preferences, and Financial Behaviors." Mimeo.

Handel, Benjamin R. 2013. "Adverse Selection and Inertia in Health Insurance Markets: When Nudging Hurts." *American Economic Review*, 103(7): 2643-2682.

***Blumenstock, Joshua, Michael Callen, and Tarek Ghani. 2018. "Why Do Defaults Affect Behavior? Experiment Evidence from Afghanistan." *American Economic Review*, 108(10): 2868-2901

Meredith Fowlie, Catherine Wolfram, C. Anna Spurlock, Annika Todd, Patrick Baylis, Peter Cappers. 2017. "Default Effects and Follow-On Behavior: Evidence from an Electricity Pricing Program". NBER Working Paper No. 23553.

Lecture 3: Time preferences I: Theory and Measurement

Recitation:

Laibson, David. 1997. "Golden Eggs and Hyperbolic Discounting." *Quarterly Journal of Economics* 112(2): 443-478.

O'Donoghue, Ted and Matthew Rabin. 1999. "Doing It Now or Later." *American Economic Review* 89(1): 103-124.

O'Donoghue, Ted and Matthew Rabin. 2001. "Choice and Procrastination." *Quarterly Journal of Economics* 116(1): 121-160.

Lecture:

Andreoni, James, Michael A. Kuhn, and Charles Sprenger. 2015. "Measuring Time Preferences: A Comparison of Experimental Methods." *Journal of Economic Behavior and Organization* 116: 451-464.

Cohen, Jonathan, Keith Marzilli Ericson, David Laibson, and John Myles White. 2016. "Measuring Time Preferences." Working Paper 22455, National Bureau of Economic Research.

Frederick, Shane, George Loewenstein, and Ted O'Donoghue. 2002. "Time Discounting and Time Preference: A Critical Review." *Journal of Economic Literature* 40(2): 351-401.

Akerlof, George A. 1991. "Procrastination and Obedience." *American Economic Review, Papers and Proceedings* 81(2): 1-19.

Ariely, Dan and Klaus Wertenbroch. 2002. "Procrastination, Deadlines, and Performance: Self-Control by Precommitment." *Psychological Science* 13(3): 219-224.

Ashraf, Nava, Dean Karlan, and Wesley Yin. 2006. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." *Quarterly Journal of Economics* 121(2): 635-672.

Kaur, Supreet, Michael Kremer, and Sendhil Mullainathan. 2015. "Self-Control at Work." *Journal of Political Economy* 123(6): 1227-1277.

Andreoni, James and Charles Sprenger. 2012. "Estimating Time Preferences from Convex Budgets." *American Economic Review* 102(7): 3333-3356.

***Augenblick, Ned, Muriel Niederle, and Charles Sprenger. 2015. "Working over Time: Dynamic Inconsistency in Real Effort Tasks." *Quarterly Journal of Economics* 130(3): 1067-1115.

DellaVigna, Stefano and Ulrike Malmendier. 2006. "Paying Not To Go To the Gym." *American Economic Review* 96(3): 694-719.

DellaVigna, Stefano and Ulrike Malmendier. 2004. "Contract Design and Self-Control: Theory and Evidence." *Quarterly Journal of Economics* 119(2): 353-402.

Eliaz, Kfir and Ran Spiegler. 2006. "Contracting with Diversely Naïve Agents." *Review of Economic Studies* 73(3): 689-714.

Gruber, Jonathan, and Botond Koszegi. 2001. "Is Addiction 'Rational'? Theory and Evidence." *Quarterly Journal of Economics* 116(4): 1261-1303.

Milkman, Katherine L., Julia A. Minson, and Kevin G.M. Volpp. 2014. "Holding the Hunger Games Hostage at the Gym: An Evaluation of Temptation Bundling." *Management Science* 60(2): 283-299.

Amador, Manuel, Ivan Werning, and George-Marios Angeletos. 2006. "Commitment vs. Flexibility." *Econometrica* 74(2): 365-396.

Lectures 4 and 5: Time Preferences II and III: Applications and Open Research Questions

Recitation:

Fudenberg, Drew, and David K. Levine. 2006. "A Dual-Self Model of Impulse Control." *American Economic Review* 96 (5): 1449–76.

*Gul, Faruk and Wolfgang Pesendorfer. 2001. "Temptation and Self-Control." *Econometrica* 69(6): 1403-1435.

* Toussaert, S., 2018. Eliciting Temptation and Self-Control Through Menu Choices: A Lab Experiment. *Econometrica*, 86(3), pp.859-889.

Lecture:

Time Preferences:

Augenblick, N. and Rabin, M., 2019. An experiment on time preference and misprediction in unpleasant tasks. *Review of Economic Studies*, 86(3), pp.941-975.

Bai, Liang, Benjamin Handel, Edward Miguel and Gautam Rao. 2017. "Self-Control and Preventive Health: Evidence from Hypertension in India." Mimeo.

Beshears, J., Choi, J.J., Laibson, D., Madrian, B.C. and Skimmyhorn, W.L., 2019. *Borrowing to save? The impact of automatic enrollment on debt* (No. w25876). National Bureau of Economic Research.

***Ericson KM, Laibson D. Intertemporal Choice. In: Bernheim D, Laibson D, DellaVigna S, Handbook of Behavioral Economics - Foundations and Applications 2. Elsevier; 2019

Meier, Stephan and Charles Sprenger. 2015. "Temporal Stability of Time Preferences." *Review of Economics and Statistics* 97(2): 273-286.

Laibson, David. 2015. "Why Don't Present-Biased Agents Make Commitments?" *American Economic Review*, 105(5): 267-272.

Schilbach, Frank. 2019 "Alcohol and Self-Control: A Field Experiment in India." *American Economic Review*, 109(4): 1290-1322

Sadoff, S., Samek, A. and Sprenger, C., 2019. Dynamic Inconsistency in Food Choice: Experimental Evidence from Two Food Deserts. *The Review of Economic Studies*.

Beshears, John, James Choi, Christopher Clayton, Christopher Harris, David Laibson, and Brigitte Madrian. 2019. "Optimal Illiquidity." Mimeo.

Hershfield, Hal. 2011. "Future Self-continuity: How Conceptions of the Future Self Transform Intertemporal Choice." *Annals of the New York Academy of Sciences* 1234: 30-43.

Andreoni, J., Callen, M., Khan, Y., Jaffar, K. and Sprenger, C., 2016. *Using preference estimates to customize incentives: An application to polio vaccination drives in Pakistan*. NBER Working Paper No. 22019.

Lecture 6: Social Preferences I: Social Pressure and Social Norms I (guest lecture by Leo Bursztyn)

***Bursztyn, Leonardo and Robert Jensen. 2015. "How Does Peer Pressure Affect Educational Investments?" *Quarterly Journal of Economics*, 130(3): 1329-1367.

Bursztyn, L., Egorov, G. and Jensen, R., 2019. Cool to be smart or smart to be cool? Understanding peer pressure in education. *The Review of Economic Studies*, 86(4), pp.1487-1526.

Austen-Smith, David and Roland G. Fryer, Jr. 2005. "An Economic Analysis of 'Acting-White'," *Quarterly Journal of Economics*, 120(2): 551-583.

Fryer Jr., Roland G. and Paul Torelli. 2010. "An Empirical Analysis of 'Acting White'," *Journal of Public Economics*, 94(5-6): 380-396.

Lecture 7: Social Preferences II: Determinants of Pro-sociality (Frank)

Lowe, M., 2020. "Types of contact: A field experiment on collaborative and adversarial caste integration." *Working Paper*.

*** Rao, G., 2019. Familiarity does not breed contempt: Generosity, discrimination, and diversity in Delhi schools. *American Economic Review*, 109(3), pp.774-809.

Hjort, J., 2014. "Ethnic Divisions and Production in Firms." *Quarterly Journal of Economics* 129(4): 1899-1946.

Levy Palluck, Elizabeth and Seth Green and Donald Green, 2018. "The Contact Hypothesis Re-Evaluated," Behavioral Public Policy.

Lecture 8: Social Preferences III: Social Image, Norms and Pressure II (Leo)

***Bursztyn, Leonardo, Georgy Egorov, and Stefano Fiorin. 2019. "From Extreme to Mainstream: The Erosion of Social Norms," Working Paper.

Bursztyn, Leonardo, Alessandra González, and David Yanagizawa-Drott. 2018. "Misperceived Social Norms: Female Labor Force Participation in Saudi Arabia," Working Paper.

Bursztyn, Leonardo and Robert Jensen. Forthcoming. "Social Image and Economic Behavior in the Field: Identifying, Understanding, and Shaping Social Pressure," *Annual Review of Economics*.

Akerlof, George and Rachel E. Kranton. 2000. "Economics and Identity." *Quarterly Journal of Economics* 115(3): 715-753.

DellaVigna, Stefano, John A. List, and Ulrike Malmendier. 2012. "Testing for Altruism and Social Pressure in Charitable Giving." *Quarterly Journal of Economics* 127(1): 1-56.

*DellaVigna, Stefano, John A. List, Ulrike Malmendier, and Gautam Rao. 2017. "Voting to Tell Others." *Review of Economic Studies* 84(1): 143-181.

Dubé, Jean-Pierre, Xueming Luo, Zheng Fang. 2015. "Self-Signaling and Prosocial Behavior: a Cause Marketing Mobile Field Experiment" Working Paper No. w21475, National Bureau of Economic Research.

Perez-Truglia, R. and Cruces, G. 2017. "Partisan Interactions: Evidence from a Field Experiment in the United States." *Journal of Political Economy* 125(4): 1208-1243.

Lecture 9: Social preferences IV (Abhijit)

***Bandiera, Oriana, Iwan Barankay and Imran Rasul. 2005. "Social Preferences and the Response to Incentives: Evidence from Personnel Data." *Quarterly Journal of Economics* 120(3): 917-962.

*Andersen, Steffen, Seda Ertaç, Uri Gneezy, Moshe Hoffman, and John A. List. 2011. "Stakes Matter in Ultimatum Games." *American Economic Review* 101(7): 3427-3439.

*Benabou, Roland and Jean Tirole. 2006. "Incentives and Prosocial Behavior." *American Economic Review* 96(5): 1652-1678.

Charness, Gary and Matthew Rabin. 2002. "Understanding Social Preferences with Simple Tests." *Quarterly Journal of Economics* 117(3): 817-869.

Gneezy, Uri, and John List. 2006. "Putting Behavioral Economics To Work: Testing For Gift Exchange In Labor Markets Using Field Experiments." *Econometrica* 74(5): 1365-1384.

Bellemare, Charles and Bruce S. Shearer. 2007. "Gift Exchange within a Firm: Evidence from a Field Experiment." IZA Discussion Paper 2696.

Falk, Armin, Stephan Meier, and Christian Zehnder. 2013. "Do Lab Experiments Misrepresent Social Preferences? The Case of Self-selected Student Samples." *Journal of the European Economic Association* 11(4): 839-852.

Grossman, Zachary and Joel J. van der Weele. 2013. "Self-image and Strategic Ignorance in Social Decisions." Mimeo.

Bolton, Gary E. and Axel Ockenfels. 2000. "ERC: A Theory of Equity, Reciprocity, and Competition." *American Economic Review* 90(1): 166-193.

Falk, Armin, Ernst Fehr, and Urs Fischbacher. 2008. "Testing Theories of Fairness—Intentions Matter." *Games and Economic Behavior* 62(1): 287-303.

Lecture 10: Social preferences V (Abhijit)

*Fehr, Ernst and Klaus Schmidt. 1999. "A Theory of Fairness, Competition, and Cooperation." *Quarterly Journal of Economics* 114(3): 817-868.

*Bandiera, Oriana, Iwan Barankay and Imran Rasul. 2005. "Social Preferences and the Response to Incentives: Evidence from Personnel Data." *Quarterly Journal of Economics* 120(3): 917-962.

*Breza, E., Kaur, S. and Shamdasani, Y., 2018. The morale effects of pay inequality. *The Quarterly Journal of Economics*, 133(2), pp.611-663.

***Breza, Emily, Supreet Kaur and Yogita Shamdasani. 2018. "The Morale Effects of Pay Inequality" *Quarterly Journal of Economics*, 133(2): 611-663.

*Card, David, Alexandre Mas, Enrico Moretti, and Emmanuel Saez. 2012. "Inequality at Work: The Effect of Peer Salaries on Job Satisfaction." *American Economic Review* 102(6): 2981-3003.

Benabou, Roland and Jean Tirole. 2011. "Identity, Morals and Taboos: Beliefs as Assets." *Quarterly Journal of Economics* 126: 805-855.

Lecture 11 and 12: Risk Preferences and Reference-Dependence (Abhijit)

***Rabin, Matthew. 2000. "Risk Aversion and Expected-Utility Theory: A Calibration Theorem." *Econometrica* 68(5): 1281-1292.

- O'Donoghue, T., Sprenger, C., 2018. Reference-Dependent Preferences, in: *Handbook of Behavioral Economics: Applications and Foundations* 1. Elsevier, pp. 1–77.
- Tversky, Amos and Daniel Kahneman. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47(2): 263-292.
- *Koszegi, Botond and Matthew Rabin. 2006. "A Model of Reference-Dependent Preferences." *Quarterly Journal of Economics* 121(4): 1133-1166.
- Koszegi, Botond and Matthew Rabin. 2007. "Reference-Dependent Risk Preferences." *American Economic Review* 97(4): 1047-1073.
- Sydnor, Justin. 2010. "(Over)insuring Modest Risks." *American Economic Journal: Applied Economics* 2(4): 177-199.
- Prelec, Drazen. 1998. "The Probability Weighting Function." *Econometrica* 66(3): 497-527.
- Marzilli Ericson, Keith M. and Andreas Fuster. 2011. "Expectations as Endowments: Evidence on Reference-Dependent Preferences from Exchange and Valuation Experiments." *Quarterly Journal of Economics* 126(4): 1879-1907.
- Sprenger, Charles. 2015. "An Endowment Effect for Risk: Experimental Tests of Stochastic Reference Points." *Journal of Political Economy* 123(6): 1456-1499.
- Cerulli-Harms, A., Goette, L. and Sprenger, C., 2019. Randomizing endowments: an experimental study of rational expectations and reference-dependent preferences. *American Economic Journal: Microeconomics*, 11(1), pp.185-207.
- Mas, Alexander. 2006. "Pay, Reference Points, and Police Performance." *Quarterly Journal of Economics* 121(3): 783-821.
- Genesove, David and Christopher Mayer. 2001. "Loss Aversion and Seller Behavior: Evidence from the Housing Market." *Quarterly Journal of Economics* 116(4): 1233-1260.
- Fehr, Ernst and Lorenz Götte. 2007. "Do Workers Work More if Wages Are High? Evidence from a Randomized Field Experiment." *American Economic Review* 97(1): 298-317.
- Camerer, Colin, Linda Babcock, George Loewenstein and Richard Thaler. 1997. "Labor Supply of New York City Cabdrivers: One Day at a Time." *Quarterly Journal of Economics* 112(2): 407-441.
- Farber, Henry S. 2005. "Is Tomorrow Another Day? The Labor Supply of New York City Cabdrivers." *Journal of Political Economy* 113(1): 46-82.
- Farber, Henry S. 2008. "Reference-Dependent Preferences and Labor Supply: The Case of New York City Taxi Drivers." *American Economic Review* 98(3): 1069-1082.

Crawford, Vincent and JuanJuan Meng. 2011. "New York City Cab Drivers' Labor Supply Revisited: Reference-Dependent Preferences with Rational Expectations Targets for Hours and Income." *American Economic Review* 101(5): 1912-1932.

*DellaVigna, S., Lindner, A., Reizer, B. and Schmieder, J.F., 2017. Reference-dependent job search: Evidence from Hungary. *The Quarterly Journal of Economics*, 132(4), pp.1969-2018

Lecture 13 and 14: Learning (Abhijit)

Banerjee, Abhijit. 1992. "A Simple Model of Herd Behavior." *Quarterly Journal of Economics* 107(3): 797-817.

Benjamin, D.J., 2019. Errors in probabilistic reasoning and judgment biases, in: *Handbook of Behavioral Economics: Applications and Foundations* 1. Elsevier, pp. 69–186.

*Rabin, Matthew. 2002. "Inference by Believers in the Law of Small Numbers." *Quarterly Journal of Economics* 117(3): 775-816.

*Eyster, Erik and Matthew Rabin. 2014. "Extensive Imitation is Irrational and Harmful." *Quarterly Journal of Economics* 129(4): 1861-1898.

Carrillo, Juan and Thomas Mariotti. 2000. "Strategic Ignorance as a Self-Disciplining Device." *Review of Economic Studies* 67: 529-544.

Golub, Benjamin and Matthew O. Jackson. 2010. "Naive Learning in Social Networks and the Wisdom of Crowds." *American Economic Journal: Microeconomics* 2(1): 112-149.

Möbius, M.M., Niederle, M., Niehaus, P. and Rosenblat, T.S., 2014. "Managing Self-Confidence." Working Paper.

Mobius, M. and T. Rosenblat. 2014. "Social Learning in Economics." *Annual Review of Economics*, 6(1): 827-847.

***Chandrasekhar, A.G., Larreguy, H. and Xandri, J.P., 2020. "Testing Models of Social Learning on Networks: Evidence from a Framed Field Experiment." *Econometrica*. 88(1), pp. 1-32.

*Mobius, M., T. Phan, and A. Szeidl. 2015. "Treasure Hunt: Social Learning in the Field." Working Paper No. w21014, National Bureau of Economic Research.

*Rema Hanna, Sendhil Mullainathan, Joshua Schwartzstein. 2014. "Learning Through Noticing: Theory and Experimental Evidence in Farming." *Quarterly Journal of Economics*.

Chen, Daniel L., Tobias J. Moskowitz, and Kelly Shue. 2016. "Decision Making Under the Gambler's Fallacy: Evidence from Asylum Judges, Loan Officers, and Baseball Umpires." *Quarterly Journal of Economics* 131(3): 1181-1242.

Enke, B. and Zimmermann, F., 2019. Correlation neglect in belief formation. *The Review of Economic Studies*, 86(1), pp.313-332.

Thaler, Richard H. 1985. "Mental Accounting and Consumer Choice." *Marketing Science* 4: 199-214.

Rabin, Matthew, and Georg Weizsäcker. 2009. "Narrow Bracketing and Dominated Choices." *American Economic Review* 99(4): 1508-1543.

*Hastings, J.S. and J.M. Shapiro. 2013. "Fungibility and Consumer Choice: Evidence from Commodity Price Shocks." *Quarterly Journal of Economics* 128(4): 1449-1498.

Prelec, Drazen, and Duncan Simester. 2001. "Always Leave Home without It: A Further Investigation of the Credit-card Effect on Willingness to Pay." *Marketing Letters* 12(1): 5-12.

Lecture 15: Behavioral Development Economics (Frank)

Kremer, M., Rao, G., Schilbach, F., 2019. Behavioral development economics, in: *Handbook of Behavioral Economics: Applications and Foundations* 1. Elsevier, pp. 345–458.

Lecture 16: Poverty (Abhijit)

***Banerjee, Abhijit and Sendhil Mullainathan. 2010. "The Shape of Temptation: Implications for the Economic Lives of the Poor." *NBER Working Paper* No. 15973.

*Abhijit Banerjee, Nathanael Goldberg, Dean Karlan, Robert Osei, William Parienté, Jeremy Shapiro, Bram Thuysbaert, and Christopher Udry. 2015. "A Multi-faceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries." *Science* 348(6236).

*Abhijit Banerjee, Dean Karlan, Hannah Trachtman, Christopher Udry "Does Poverty Change Labor Supply? Evidence from Multiple Income Effects and 115,579 Bags", manuscript in preparation.

Becker, Gary and Casey Mulligan. 1997. "The Endogenous Determination of Time Preference." *Quarterly Journal of Economics* 112(3): 729–758.

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Lecture 17: Behavioral Public Finance I: Optimal Sin Taxes (Hunt)

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Lecture 18: Behavioral Public Finance II: Optimal Nudges

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Lecture 19 and 20: Behavioral Industrial Organization (Abhijit)

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Lecture 21: Gender (Leo)

***Bursztyn, Leonardo, Thomas Fujiwara, and Amanda Pallais. 2017. "'Acting Wife': Marriage Market Incentives and Labor Market Investments," *American Economic Review*, 107(11): 3288-3319.

*Bertrand, Marianne, Emir Kamenica, and Jessica Pan. 2015. "Gender Identity and Relative Income Within Households," *Quarterly Journal of Economics*, 130(2): 571-614.

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[For Lectures 22 and 21 below, please write 3 paragraphs for each of the starred readings:

1. What did you find most exciting/interesting?
2. Pick an econ topic for which the readings are relevant/important and explain why
3. Sketch a potential study]

Lecture 22: Mental Health (Frank)

***Gotlib, I.H. and Joormann, J., 2010. Cognition and depression: current status and future directions. *Annual review of clinical psychology*, 6, pp.285-312.

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Lecture 23: Psychology for Economists (Frank)

***Ross, Lee and Richard E. Nisbett. 1991. *The Person and the Situation: Perspectives of Social Psychology*. Chapters 1-3.

Diamond, Adele. 2013. “Executive Functions.” *Annual Review of Psychology* 64: 135-168.

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Situation Integration – Personality and Assessment at Age 40. Special Issue in Journal of Research in Personality 43 (2009).

Lecture 24: In-Class Presentations of Research Proposals

Other MIT resources

The Department of Economics values an inclusive environment. If you need a disability accommodation to access this course, please communicate with us early in the semester. If you have your accommodation letter, please meet with the faculty so that we can understand your needs and implement your approved accommodations. If you have not yet been approved for accommodations, please contact Student Disability Services at uaap-sds@mit.edu to learn about their procedures. We encourage you to do so early in the term to allow sufficient time for implementation of services/accommodations that you may need.

The WCC at MIT (Writing and Communication Center) offers *free* one-on-one professional advice from communication experts. The WCC is staffed completely by MIT lecturers. All have advanced degrees. All are experienced college classroom teachers of communication. All are all are published scholars and writers. Not counting the WCC's director's years (he started the WCC in 1982), the WCC lecturers have a combined 133 years' worth of teaching here at MIT (ranging from 4 to 24 years). The WCC works with undergraduate, graduate students, post-docs, faculty, staff, alums, and spouses. The WCC helps you strategize about all types of academic and professional writing as well as about all aspects of oral presentations (including practicing classroom presentations & conference talks as well as designing slides). No matter what department or discipline you are in, the WCC helps you think your way more deeply into your topic, helps you see new implications in your data, research, and ideas. The WCC also helps with all English as Second Language issues, from writing and grammar to pronunciation and conversation practice. The WCC is located in E18-233, 50 Ames Street). To guarantee yourself a time, make an appointment. To register with our online scheduler and to make appointments, go to <https://mit.mywconline.com/> . To access the WCC's many pages of advice about writing and oral presentations, go to <http://cmsw.mit.edu/writing-and-communication-center/>. Check the online scheduler for up-to-date hours and available appointments.