

ECO331H1F: Behavioural and Experimental Economics

University of Toronto
Department of Economics

Fall 2025

Instructor: Dan McGee

Email: d.mcgee@utoronto.ca (please use this email and not the Quercus messaging tool)

Teaching Assistants: Alan Jun Zhu (alanjun.zhu@mail.utoronto.ca)

Lectures: Thursday 10am-1pm

Instructor Office Hours: Thursdays 2:30pm - 3:30pm (other times available by appointment)

TA Office Hours: TBD

1 Course Description

Behavioural economics is a field which strives to introduce more psychologically realistic and less restrictive assumptions about human behaviour into economics, and experimental economics is a methodological movement which uses controlled experiments in the lab and in the field as a tool to cleanly identify the causal mechanisms behind observed behaviour. These two topics are often taught together as in this course as behavioural economists were among the early adopters of experimental methods and experimental findings continue to influence the theories that behavioural economists develop. This course provides an introduction to behavioural economics, highlighting deviations from the ‘ECO101’ model of human behaviour and to experimental economics, focusing on the twin goals of internal and external validity. By the end of the course, you will be able to:

- Identify ‘classical’ assumptions used in economic models and understand common behavioural alternatives and the evidence for these alternatives
- Critically read an experimental paper to identify threats to internal and external validity
- Predict possible deviations from classical models and likely outcomes in a variety of economic settings
- Design a simple economic experiment to test a hypothesis and understand key design decisions
- Communicate economic reasoning in clear and accessible language as for a non-expert audience.

1.1 Expectations for Student Success

It is strongly recommended that you remain current to understand the new material. In particular, you are expected to have read the assigned readings for each week before coming to class. If you fall behind, I strongly recommend that you speak to myself or one of the Teaching Assistants to help you understand the material so that you do not fall further behind. I strongly encourage students to come to my office hours and ask questions of the material—even if you do not have a specific question, I am happy to discuss the course material if it will help your understanding. I also encourage collaboration and discussion with your peers as I find students learn best when they have opportunities to try and explain course content in their own words. For this reason, you may discuss journal articles and the written assignment with your peers.

However, any submission must represent your own work and may not plagiarize another student's ideas.

Mental Health and Stress Management Resources: As a student, you may experience a range of issues in both your academic and personal life that can cause barriers to learning and negatively impact your personal well-being. If the source of your stressors is academic, please contact me so that we can find solutions together. For personal concerns or if you are worried about a friend, there are a variety of resources that UofT makes available to you, which can be found at: <https://studentlife.utoronto.ca/task/support-when-you-feel-distressed/>.

If you are experiencing mental health concerns, seeking help is a **smart** and **courageous** thing to do—for yourself and those who care about you.

1.2 Prerequisites and Exclusions

Prerequisites: ECO200/ECO204/ECO206. ECO220/ECO227/(STA237,STA238)/(STA247,STA248)/(STA257,261) Additionally, the course assumes a general comfort with algebra and calculus.

Exclusions: None.

2 Marking Scheme

Your final grade will depend on **In-Class Assignments** (10%), a **Midterm Exam** (25%), two **‘Journal Club’ Submissions** (20%), an **Experimental Design** (20%), and a **Final Exam** (25%)

The **In-Class Assignments** will be graded on a completion basis (0/2 = no submission, 1/2 = submission displays limited effort and/or understanding, 2/2 = submission displays good effort and understanding). These assignments will relate to the readings for that week and involve a short written response. They will be handed out at the beginning of class and collected by the end of class. There will be 5 assignments over the course of the semester and your lowest grade will be dropped and replaced with a score equal to your highest grade.

The **Midterm Exam** will take place on **October 16** from **10am-12pm** in Room 101 in the Isabel Bader Theatre (93 Charles St. W). All material from the first six weeks is eligible to be covered on the midterm.

The **‘Journal Club’** assignment requires you to read and critique two journal articles over the course of the semester. You will prepare a written report on the article which briefly summarizes the experimental design and key results of the article and then provides an analysis of the experiment's internal and external validity (as we will discuss during Week 2). This written report will be no longer than two pages at 1.5 spacing and will be graded according to a rubric provided during Week 2 (each is worth 10% of your course grade). You may choose any two of the articles noted with a † on the reading list below. The first journal club submission will be due at **11am on Friday, October 24th**, the last day before the Fall Break, and the second journal club submission will be due at **11am on Wednesday, December 3rd**, the last day of regular classes.

The **Experimental Design** comprises three components: an initial submission (5%), peer assessments (5%), and final submission (10%). In this assignment, you will design a simple experiment to test a behavioural hypothesis. The assignment will be staged as follows:

- The initial submission is due at **11am, Friday, November 7** (the first Friday following reading week). This submission will be an outline of your hypothesis and a preliminary design.
- The peer assessments are due at **11am, Friday, November 14**. Each student will be assigned

three classmates' outlines to read and provide constructive feedback using a rubric we will provide on potential internal/external validity concerns.

- The final submission is due at **11am, Wednesday, December 3**.
- **Note:** Other students' assessments of your initial submission do not count towards your grade—the 5% weight is for completing the peer assessments assigned to you.

The **Final Exam** will take place during the final exam period scheduled by the university. It will be a 2-hour cumulative exam with more weight on material from after the midterm.

3 Course Schedule and Readings

Articles noted with a † are options for the 'journal club' assignment and will not be discussed in class.

Week 1: Introduction to Behavioural & Experimental Economics

Rabin, Matthew. "A Perspective on Psychology and Economics." *European Economic Review*. Vol. 46(4), 2002. pp. 657-685.

Thaler, Richard H. "From Cashews to Nudges: The Evolution of Behavioral Economics." *American Economic Review*. Vol. 108(6), 2018. pp. 1265-1287.

Week 2: Experimental Design: Internal and External Validity

Gazzale, Robert, Sarah Jacobson, and Sera Linardi. "Experiment Nuts and Bolts" *Mimeo*. 2018.

Yariv, Leeat. "Reading Critically Experimental Papers." *Mimeo*. 2021.

Week 3: Individual Choice 'Anomalies'

Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias." *Journal of Economic Perspectives*. Vol. 5(1), 1991. pp. 193-206.

Harbaugh, William T., Kate Krause, and Lise Vesterlund. "The Fourfold Pattern of Risk Attitudes in Choice and Pricing Tasks." *Economic Journal*. Vol. 120(545), 2010. pp. 595-611.

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

† Nielsen, Kirby and John Rehbeck. "When Choices are Mistakes." *American Economic Review*. Vol. 112(7), 2022. pp. 2237-2268.

Week 4: Social Preferences and Intrinsic Motivation

Levitt, Steven D. and John A. List. "What do laboratory experiments measuring social preferences reveal about the real world?" *Journal of Economic Perspectives*. Vol. 21(2), 2007. pp. 153-174.

Oxoby, Robert J. and John Spraggon. "Mine and Yours: Property Rights in Dictator Games." *Journal of Economic Behavior and Organization*. Vol. 65(4), 2008. pp. 703-713.

Gneezy, Uri and Aldo Rustichini. "A Fine is a Price." *Journal of Legal Studies*. Vol. 29(1), 2000. pp. 1-17.

† DellaVigna, Stefano, John A. List, Ulrike Malmendier, and Gautam Rao. “Estimating Social Preferences and Gift Exchange at Work.” *American Economic Review*. Vol. 112(3), 2022. pp. 1038-1074.

Week 5: Limited Attention and Simplification

Read, Daniel, George Loewenstein, and Matthew Rabin. “Choice Bracketing.” *Journal of Risk and Uncertainty*. Vol. 19(3), 1999. pp. 171-197.

Iyengar, Sheena S. and Mark R. Lepper. “When Choice is Demotivating: Can One Desire Too Much of a Good Thing?” *Journal of Personality and Social Psychology*. Vol. 79(6), 2000. pp. 995-1006.

Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer. “Salience.” *Annual Review of Economics*. Vol. 14, 2022. pp. 521-544.

† Karlan, Dean, Margaret McConnell, Sendhil Mullainathan, and Jonathan Zinman. “Getting to the Top of Mind: How Reminders Increase Saving.” *Management Science*. Vol. 62(12), 2016. pp. 3393-3411.

Week 6: Designing for Behavioural Agents

Thaler, Richard H. and Shlomo Benartzi. “Save More Tomorrow(TM): Using Behavioral Economics to Increase Employee Saving.” *Journal of Political Economy*. Vol. 112(1), 2004. pp. 164-187.

DellaVigna, Stefano and Ulrike Malmendier. “Paying Not to go to the Gym.” *American Economic Review*. Vol. 96(3), 2006. pp. 694-719.

Hossain, Tanjim and John Morgan. “...Plus Shipping and Handling: Revenue (Non)Equivalence in Field Experiments on eBay.” *Advances in Economic Analysis & Policy*. Vol. 6(2), 2006. pp. 1-30.

† Allcott, Hunt, Matthew Gentzkow, and Lena Song. “Digital Addiction.” *American Economic Review*. Vol. 112(7), 2022. pp. 2424-2463.

Week 7: Midterm Exam: 10am-12pm Room 101 Isabel Bader Theatre, 93 Charles St. W

No Assigned Readings

Week 8: Experiments as a Research and Policy Tool

Smith, Vernon L. “Economics in the Laboratory.” *Journal of Economic Perspectives*. Vol. 8(1), 1994. pp. 113-131.

Loewenstein, George. “Experimental Economics from the Vantage Point of Behavioural Economics.” *Economic Journal*. Vol. 109(453), 1999. pp. 25-34.

Niederle, Muriel. “Experiments: Why, How, and a Users Guide for Producers as Well as Consumers.” *Mimeo*. 2025.

Week 9: Reading Week (No Class)

No Assigned Readings

Week 10: Errors in Belief Updating

Tversky, Amos and Daniel Kahneman. “Judgment Under Uncertainty: Heuristics and Biases.” *Science*.

Vol. 185(4157), 1974. pp. 1124-1131.

Sundali, James and Rachel Croson. “Biases in Casino Betting: The Hot Hand and the Gambler’s Fallacy.” *Judgment and Decision Making*. Vol. 1(1), 2006. pp. 1-12.

Fan, Tony Q., Yucheng Liang, and Cameron Peng. “The Inference-Forecast Gap in Belief Updating.” *Mimeo*. 2024.

† Esponda, Ignacio, Emanuel Vespa, and Sevgi Yuksel. “Mental Models and Learning: The Case of Base-Rate Neglect.” *American Economic Review*. Vol. 114(3), 2024. pp. 752-782.

Week 11: Deliberately Incorrect Beliefs: Motivated Reasoning

Eil, David and Justin M. Rao. “The Good News-Bad News Effect: Asymmetric Processing of Objective Information About Yourself.” *American Economic Journal: Microeconomics*. Vol. 3(2), 2011. pp 114-138.

Benabou, Roland and Jean Tirole. “Mindful Economics: The Production, Consumption, and Value of Beliefs.” *Journal of Economic Perspectives*. Vol. 30(3), 2016. pp. 141-164.

Stoetzer, Lasse S. and Florian Zimmermann. “A Note on Motivated Cognition and Discriminatory Beliefs.” *Games and Economic Behavior*. Vol. 147, 2024. pp. 554-562.

† Thaler, Michael. “The Fake News Effect: Experimentally Identifying Motivated Reasoning Using Trust in News.” *American Economic Journal: Microeconomics*. Vol. 16(2), 2024. pp. 1-38.

Week 12: Special Topics: Economics of Identity

Niederle, Muriel and Lise Vesterlund. “Do Women Shy Away From Competition? Do Men Compete Too Much.” *Quarterly Journal of Economics*. Vol. 122(3), 2007. pp. 1067-1101.

Chen, Yan and Li, Sherry X. “Group Identity and Social Preferences.” *American Economic Review*. Vol. 99(1), 2009. pp. 431-457.

Benjamin, Daniel J., James J. Choi, and A. Joshua Strickland. “Social Identity and Preferences.” *American Economic Review*. Vol. 100(4), 2010. pp. 1913-1928.

† Oh, Suanna. “Does Identity Affect Labor Supply?” *American Economic Review*. Vol. 113(8), 2023. pp. 2055-2083.

Week 13: Special Topics: Complexity and Economic Choice

Oechssler, Jorg, Andreas Roider, and Patrick W. Schmitz. “Cognitive Abilities and Behavioral Biases.” *Journal of Economic Behavior & Organization*. Vol. 72(1), 2009. pp. 147-152.

Deck, Cary and Salar Jahedi. “The Effect of Cognitive Load on Economic Decision Making: A Survey and New Experiments.” *European Economic Review*. Vol. 78, 2015. pp. 97-119.

Oprea, Ryan. “Decisions Under Risk are Decisions Under Complexity.” *American Economic Review*. Vol. 114(12), 2024. pp. 3789-3811.

† Enke, Benjamin and Thomas Graeber. “Cognitive Uncertainty.” *Quarterly Journal of Economics*. Vol. 138(4), 2023. pp. 2021-2067.

4 Course Materials

Lecture notes, readings, and announcements will be posted on the Quercus course website. There is no required textbook for the course as we will focus on reading academic articles and any supplementary material will be provided in the lecture notes. If you are interested, the following two (optional) sources provide excellent coverage of experimental methods and their use in economics:

Friedman, Daniel and Shyam Sunder. *Experimental Methods: A Primer for Economists*. Cambridge University Press, 1994.

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

5 Course Policies

For any questions not covered below, please refer to the resources available to current students at <https://www.artsci.utoronto.ca/current/academic-advising-and-support> and <http://artsci.utoronto.ca/current/academics>. You may face situations out of your control that may not fit neatly within the standard accommodations framework. If this applies to you at any point during the term, please feel free to reach out to me and/or an advisor in the College Registrar's office.

5.1 Late and Missed Term Work

For the **In-Class Assignments**, since the grading scheme allows you to miss up one assignment while receiving full credit and will occur during class, no further credit for missed work will be provided.

For the **Midterm Exam**, the accommodation for missing the midterm is that the weight of the midterm will be added to the final exam for a total weight of 50%. To qualify for this re-weighting, you must: (i) Notify the instructor no later than the beginning of the midterm exam and (ii) Provide documentation of the absence through the Absence Declaration in ACORN or UofT Verification of Illness or Injury Form or Letter of Academic Accommodation from Accessibility Services.

For the **Experimental Design**, late submission of any stage will result in a grade penalty. In the case of the initial submission and peer assessments, as a late submission imposes costs on your peers, late submissions will face the following penalty scheme:

- 10% penalty for work submitted up to 1 hour late
- 20% penalty for work submitted more than 1 hour and less than 24 hours late
- 20% penalty for each subsequent 24 hours

That is, work submitted 1 minute late will receive a 10% penalty, work submitted 61 minutes late will receive a 20% penalty, and work submitted 24 hours and 1 minute late will receive a 40% penalty, and so on.

For the final submission, late work will receive an immediate 10% penalty, and an additional 10% penalty for each subsequent 24 hours that it is late.

For the **Journal Club** submissions, late work will receive an immediate 10% penalty, and an additional 10% penalty for each subsequent 24 hours that it is late (the same as the final written assignment submission).

For the **Final Exam**, if you miss the final exam, you can submit a petition to defer it. See more information on how to do so here: <https://www.artsci.utoronto.ca/current/faculty-registrar/petitions/deferred-exams>

5.2 Regrading Policy

If you are only noting a tabulation error (i.e., points given on individual questions do not sum to the total listed for the exam), we will take the point totals on individual questions as correct.

If you are requesting a regrade, all regrade requests must be submitted no sooner than 48 hours after the assignment has been handed back and no later than 1 week after. All regrade requests must include a detailed rationale for why more marks are merited. While your request may be specific to a given question, the entire assignment may be regraded and your grade may go up or down.

5.3 Religious Accommodation

As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of backgrounds, cultural traditions, and spiritual beliefs. I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not covered by statutory holidays. Following University Policy, if you anticipate being absent from class or missing a major course activity (e.g., midterm exam) due to a religious observance, please let me know as early as possible with two to three weeks notice so that we can organize an opportunity for you to make up any work you miss.

5.4 Learning Disability Accommodation

Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your individual situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that this process is private: AS will not share details of your condition with any instructor beyond the accommodations required for a given assessment, and your instructors will not reveal that you are registered with AS.

5.5 Family Care Responsibilities

The University of Toronto strives to provide a family-friendly environment. You may wish to inform me if you are a student with family care responsibilities. If you are a student parent or have family responsibilities, you may also wish to visit the Family Care Office website for further support.

5.6 Equity, Diversity, and Inclusion

Our Role: It is our intent that students from all backgrounds and perspectives be well served by this course. The diversity that students bring to this class is a strength and benefit. It is our intent to present materials and activities that are respectful of this diversity, including in the dimensions of race, culture, ethnicity and national origins, gender and gender identity, sexuality, socioeconomic class, age, religion, and disability. Your suggestions are encouraged and appreciated.

We unfortunately do not have the ability to change names on the course roster. If you use a different

name, please let us know so that we can use it whenever we can. You may also share your preferred gender pronouns. Prof. McGee uses he/him.

Your Role: The University of Toronto is committed to equity, human rights, and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

5.7 Academic Integrity

All students, faculty, and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty when writing assignments, collaborating with fellow students, and writing tests and exams. Ensure that the work you submit for grading represents your own honest efforts. Plagiarism—representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program—is a serious offence that can result in sanctions.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to me.

5.8 Use of Generative AI

Students may use artificial intelligence tools, including generative AI, in this course as a learning aid but are not permitted to submit text written by generative AI as if it were the student's own. Furthermore, you will not be permitted to use generative AI on the midterm test or final exam. Note: Generative AI may produce content which is incorrect or misleading, or inconsistent with the expectations of this course. These tools may even provide citations to sources that don't exist—and submitting work with false citations is an academic offense.

Generative AI is not required to complete any aspect of this course, and we caution you to not rely entirely on these tools to complete your coursework. Instead, we recommend treating generative AI as a supplementary tool only for exploration or drafting content. Ultimately, you (and not any AI tool) are responsible for your own learning in this course, and for all the work you submit for credit. It is your responsibility to critically evaluate the content generated, and to regularly assess your own learning independent of generative AI tools. Overreliance on generative AI may give you a false sense of how much you've actually learned, which can lead to poor performance on the midterm test or final exam, in later courses, or in future work or studies after graduation.

Finally, if a student wishes to use AI for the **Written Assignment** or **Journal Club** submissions, the submission must be accompanied by an AI statement describing how generative AI was used and how the results were incorporated into the submitted work, including a list of prompts used by the student. This statement does not count towards any page limit. Using generative AI without such a statement or with a statement that does not accurately represent your use of AI shall be treated as an academic offence (see above on academic integrity).