ECO331: Fall 2024

Behavioural and Experimental Economics

Xiaoya Gao

August 28, 2024

1 The Big Picture

Section LEC0101 Thursday, 10:00 AM - 1:00 PM location: FE 230

Course Contacts

Instructor:	Xiaoya Gao
Email:	xya.gao@mail.utoronto.ca
	Drop in: GE room 213: Mondays, 4:00 pm-5:00 pm
Office Hours and Location	By appointment: in person or online
TAs:	TBD

Course Materials

- Required: MobLab: https://www.moblab.com The cost is \$15 for the semester. See Quercus for registration instructions.

- Required: Articles, book chapters, and handouts as posted on Quercus.

Marking Scheme

	Date	Length	weight
In class assignment	All semester	N/A	12%
Writing for the Week	All semester	N/A	12.5%
Term Test	2024-10-10	¡ 2hours	25%
Term Paper	See Below	NA	25%
Final Exam	TBD	2 hours	25.5%

2 Course Overview

Ample empirical and experimental evidence suggests significant departures from classical assumptions of economic behaviour. For example, humans are neither always perfectly rational nor always self-interested. This course describes systematic ways in which behaviour deviates from neoclassical assumptions, generating new, and hopefully, more realistic behavioural assumptions that have broad empirical, theoretical, and policy implications.

Course Learning Outcomes

There are three goals of this course:

1. Behavioural Economics: Understand a set of insights from behavioural economics with an eye towards recognizing how these insights improve the economist's ability to explain and predict real-world behaviour.

2. Experimental Economics: Understand the methods of modern experimental economics with an eye to assessing the results of human-subject experiments. In particular, you will gain practice in both posing testable hypotheses that follow up on published human-subject experiments and identifying how to test these hypotheses.

3. Behavioural Economics & Experimental Economics: Understand the interactions between the experiments and the economic theories.

3   Policies & Statements

3.1   Plagiarism Detection Tool

Plagiarism is a potentially serious problem in writing assignments. This course will use plagiarism-detection software.

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation website (https://uoft.me/pdt-faq).

Artificial-Intelligence Tools, including Generative AI (e.g., Chat-GPT)

Artificial Intelligence tools, including generative AI (e.g., ChatGPT) Generative AI—including, but not limited to, ChatGPT—are unauthorized for all assessments and assignments except the Term Paper. You may use artificial-intelligence tools, including generative AI, in this course as learning aids or to help prepare your Term Paper. If you choose to use artificial intelligence tools for your Term Paper:

- You are ultimately accountable for the work you submit.

- Any content produced by an artificial intelligence tool must be cited appropriately. See, for example, https://style.mla.org/citing-generative-ai/.

- Your use of these tools must be documented in an appendix. This appendix must include what tool(s) were used, how they were used, and how the results from the AI were incorporated into the submitted work. The appendix does not count towards any assignment word limit.

- You will also be required to upload any and all transcripts from your interactions with the tools.

3.2 Religious Accommodations

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 cultural and religious traditions. For my part, I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory holidays. Further to University Policy, if you anticipate being absent from class or missing a major course activity (such as a test or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

3.3 Students with Disabilities or Accommodation Requirements

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 by visiting https://studentlife.utoronto.ca/department/accessibility-services/. 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 situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

3.4 Academic Integrity

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. Note that you are expected to seek out additional information on academic integrity from me or from other institutional resources. For example, to learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at http://www.writing.utoronto.ca. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see A&S Student Academic Integrity (https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity) and the University of Toronto Website on Academic Integrity (https://www.academicintegrity.utoronto.ca).

3.5 Specific Medical Circumstances

If you become ill and it affects your ability to do your academic work, consult me right away. Normally, I will ask you for documentation in support of your specific medical circumstances. This documentation can be an Absence Declaration (via ACORN) or the University's Verification of Student Illness or Injury (VOI) form. The VOI indicates the impact and severity of the illness while protecting your privacy about the details of the nature of the illness. If you cannot submit a VOI due to limits on terms of use, you can submit a different form (like a letter from a doctor), as long as it is an original document, and it contains the same information as the VOI (including dates, academic impact, practitioner's signature, phone and registration number). For more information on the VOI, please see http://www.illnessverification.utoronto.ca.

For information on Absence Declaration Tool for A&S students, please see https://www.artsci.utoronto.ca/absence. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

3.6   Accommodation for Personal Reasons

There may be times when you are unable to complete coursework on time due to non-medical reasons. If you have concerns, speak to me or to an advisor in your College Registrar's office; they can help you to decide if you want to request an extension or other forms of academic consideration. They may be able to email your instructors directly to provide a College Registrar's letter of support and connect you with other helpful resources on campus.

3.7   Make-Up Tests

if you miss the term test due to illness you must let me know before the exam begins and also declare your absence using the form on ACORN or provide other supporting documents. Acceptable documentation includes:

- Absence declaration via ACORN

- UofT Verification of Illness or Injury (VOI) Form

- College Registrar's letter or Letter of Academic Accommodation from Accessibility Services.

If your documentation is the UofT Verification of Illness or Injury Form, your Licensed Healthcare Practitioner must assess the impact as either Moderate, Serious, or Severe. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

The makeup term test will be similar form as the formal term test. If you take neither term test, you will be advised to drop the course.

N.B. Students who miss the final exam must petition the Faculty of Arts and Science for permission to write a deferred examination.

3.8   Quercus Info

This Course uses the University's learning management system, Quercus, to post information about the course. This includes posting readings and other materials required to complete class activities and course assignments, as well as sharing important announcements and updates. New information and resources will be posted regularly as we move through the term. To access the course website, go to the U of T Quercus log-in page at https://q.utoronto.ca. SPECIAL NOTE ABOUT GRADES POSTED ONLINE: Please also note that any grades posted are for your information only, so you can view and track your progress through the course. No grades are considered official, including any posted in Quercus at any point in the term, until they have been formally approved and posted on ACORN at the end of the course. Please contact me as soon as possible if you think there is an error in any grade posted on Quercus.

3.9   Mental Health and Well-Being

Your mental health is important. Throughout university life, there are many experiences that can impact your mental health and well-being. As a University of Toronto student, you can access free mental health and wellbeing services at Health & Wellness (https://studentlife.utoronto.ca/department/health-wellness/) such as same day counselling, brief counselling, medical care, skill-building workshops, and drop-in peer support. You can also meet with a Wellness Navigation Advisor who can connect you with other campus and community services and support. Call the mental health clinic at 416-978-8030 ext.

5 to book an appointment or visit https://uoft.me/mentalhealthcare to learn about the services available to you.

You can also visit your College Registrar to learn about the resources and supports available: https://www.artsci.utoronto.ca/current/academic-advising-and-support/college-registrars-offices If you're in distress, you can access immediate support: https://uoft.me/feelingdistressed

3.10   Equity, Diversity and Inclusion

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.

4   Assessment

4.1   In class assignment

Writing Prompts/Question Prompts: Writing/Question prompts will be randomly assigned during class (i.e., maybe beginning, middle, or end). Responses will be marked very coarsely. 4 marks Student handed in something! 8.5 marks Response shows a general understanding of, and engagement with, the material. 10 marks Response shows a sophisticated understanding of the material.

Experiment Participation: In this course, you will participate in a series of classic experiments. You will generally participate using MobLab. In most cases, you earn full marks for sincere participation. Each week, I take all the

marks you earn and scale them so that the student earning full marks earns 1.5%. The marks you earn for in-class assignments are the sum of your eight highest-scoring weeks to a maximum of 12%.

4.2   Writing for the Week

There are two objectives for this assignment. The first is to give you practice with short, critical writing. The second is to provide incentives to critically engage with the week's readings before the lecture. For (almost) every course topic, there is the possibility to submit a Writing for the Week assignment covering the required reading for the topic.

- The writing prompt for the week will be posted on Quercus.

- Your submission should be two paragraphs, no more than 325 words.

- Submissions must be received by Wednesday at 9pm. Late submissions are not accepted.

- You may make at most one submission per week.

- The predicted marking scheme:

  0.75% Student handed in something!

  1.5% It does appear that the student read the paper.

  2.125% A solid effort consistent with a good understanding of the factual elements of the article.

  2.5% A great effort consistent with an advanced understanding of subtle study details and their implications.

  The mark you earn for this assignment is the sum of your five highest scores among your first six submissions, up to a maximum of 12.5%. Any submission after your first six is not considered.

4.3   Term Paper

While full details of the Term Paper will be provided later in the course, I provide a general outline here. The writing assignment will be a short essay of approximately 1,000 words (about four pages double-spaced) applying devices and results from this course to an assigned question. The assignment details will be available by the end of January. The assignment will be staged with two submissions and an intervening peer assessment.

- The First Submission is due **Friday, Nov. 15, 2024, 11:00 AM**.

- Students will then be assigned three classmates' papers to read and provide constructive feedback and suggestions (using a form/rubric that we provide). The deadline for providing this "peer assessment" is **Friday, Nov 22, 2024, 11:00 AM**.

- Students will then have until **Friday, March 29, 2024 at 11:00 AM** to submit the "Final Submission" that incorporates any useful suggestions or insights from the peer review process. Included in this submission will be a short reflection to the peer reviews received, as well as an explanation of any other revisions made between the first and second submissions.

- The weights for the final grade for the Term Paper will be:

  30% The First Submission;

  20% The Peer Assessments provided for other papers;

  40% The Final Submission; and 10% The Reflection Piece, a "self-assessment" of the explanation of the revisions to the first draft.

No extensions will be granted due to illness, computer problems, or any other excuse, as ample time has been provided to complete the project.

Late penalties, incorporating the fact that late first submissions and peer assessments impose negative externalities on classmates, are as follows: First

Submission: 5 percentage points for the first hour. 15 percentage points for each subsequent 24 hours. Peer Assessments: 5 percentage points for the first hour. 15 percentage points for each subsequent 24 hours. Final Submission: 5 percentage points for each 24 hours.

Consider a First Submission or Peer Assessment that earns 75% of available marks. You will receive a 70% marks if it is one second late and 55% if it is 25 hours and one second late.

5 Tentative Schedule

The reading list is tentative. Any modifications will be widely announced. Entries preceded by a † are suggested, but not required.

1. **Introduction (Sep. 5th)**

   - Richard H. Thaler. "From Homo Economicus to Homo Sapiens". *Journal of Economic Perspectives* 14, no. 1 (2000): 133–141

   - † Andrew Schotter. *On the Relationship Between Economic Theory and Experiments.* Oxford University Press, Feb. 2015. ISBN: 9780195328325

   - † Steven D. Levitt and John A. List. "What Do Laboratory Experiments Measuring Social Preferences Reveal About the Real World?" *The Journal of Economic Perspectives* 21, no. 2 (2007): 153–174

2. **Experiment Design; Internal & External Validity (Sep. 12th)**

   - Gazzale, Robert, Sarah Jacobson, and Sera Linardi, Experiment Nuts and Bolts, 2018.

   - Muriel Niederle, Uri Gneezy, and Aldo Rustichini. "Performance In Competitive Environments: Gender Differences". *The Quarterly Journal of Economics* 118 (Feb. 2003): 1049–1074

- D. Friedman and S. Sunder. *Experimental Methods: A Primer for Economists*. Cambridge University Press, 1994. ISBN: 9781107717282

3. **A Failure to Optimize I: A Smorgasbord (Sep. 19th)**

- Chapter 1-3 in Daniel Kahneman. "Thinking, fast and slow". Chap. 1-3. Toronto: Doubleday Canada, 2011

- Sheena Iyengar and Mark Lepper. "When Choice is Demotivating: Can One Desire Too Much of a Good Thing?" *Journal of personality and social psychology* 79 (Jan. 2001): 995–1006

- Shai Danziger, Jonathan Levav, and Liora Avnaim-Pesso. "Extraneous factors in judicial decisions". *Proceedings of the National Academy of Sciences* 108, no. 17 (2011): 6889–6892

- Anandi Mani et al. "Poverty Impedes Cognitive Function". *Science* 341, no. 6149 (2013): 976–980

4. **A Failure to Optimize II: People and Probabilities (Sep. 26th)**

- Nicholas Barberis, Andrei Shleifer, and Robert Vishny. "A Model of Investor Sentiment". *Journal of Financial Economics* 49, no. 3 (1998): 307–343

- Amos Tversky and Daniel Kahneman. "Judgment under Uncertainty: Heuristics and Biases". *Science* 185, no. 4157 (1974): 1124–1131

5. **Risk Preference (Oct. 3rd)**

- Daniel Kahneman, Jack L. Knetsch, and Richard H. Thaler. "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias". *Journal of Economic Perspectives* 5, no. 1 (1991): 193–206

- Jack Knetsch and Richard Thaler. "Experimental Tests of the Endowment Effect and the Coase Theorem," Journal of Political Economy 98, 1325-1348". *Journal of Political Economy* 98 (Feb. 1990): 1325–48

- Daniel Kahneman and Amos Tversky. "Prospect Theory: An Analysis of Decision under Risk". *Econometrica* 47, no. 2 (1979): 263–291

- †Charles R. Plott and Kathryn Zeiler. "The Willingness to Pay-Willingness to Accept Gap, the "Endowment Effect," Subject Misconceptions, and Experimental Procedures for Eliciting Valuations". *American Economic Review* 95, no. 3 (2005): 530–545

- †Matthew Rabin. "Risk Aversion and Expected-Utility Theory: A Calibration Theorem". *Econometrica* 68, no. 5 (2000): 1281–1292. Visited on 08/26/2024

6. **Midterm Test (Oct. 10th)**

7. **Defaults, Nudges, and Frames (Oct. 17th)**

- Richard H. Thaler. "Mental accounting matters". *Journal of Behavioral Decision Making* 12, no. 3 (1999): 183–206

- Ernst Fehr and Lorenz Goette. "Do Workers Work More if Wages Are High? Evidence from a Randomized Field Experiment". *American Economic Review* 97, no. 1 (2007): 298–317

- Shlomo Benartzi and Richard H. Thaler. "Myopic Loss Aversion and the Equity Premium Puzzle*". *The Quarterly Journal of Economics* 110, no. 1 (Feb. 1995): 73–92

8. **Term Paper Tutorials (Oct. 24th)**

Details forthcoming.

9. **Do we even know what we want? (Nov. 7th)**

   - Daniel Kahneman, Peter Wakker, and Rakesh Sarin. "Back to Bentham? Explorations of Experienced Utility". *The Quarterly Journal of Economics* 112, no. 2 (1997): 375–406

   - George Loewenstein and Drazen Prelec. ""Coherent Arbitrariness": Stable Demand Curves Without Stable Preferences". *The Quarterly Journal of Economics* 118 (Feb. 2003): 73–105

   - †Daniel Gilbert et al. "Immune Neglect: A Source of Durability Bias in Affective Forecasting". *Journal of personality and social psychology* 75 (Sept. 1998): 617–38

10. **Present Bias & Bounded self-control (Nov. 14th)**

   - Gazzale, Robert, Discounting for Dummies, 2017.

   - Nava Ashraf, Dean Karlan, and Wesley Yin. "Tying Odysseus to the Mast: Evidence From a Commitment Savings Product in the Philippines*". *The Quarterly Journal of Economics* 121, no. 2 (May 2006): 635–672

   - Stefano DellaVigna and Ulrike Malmendier. "Paying Not to Go to the Gym". *American Economic Review* 96, no. 3 (2006): 694–719

   - Shane Frederick, George Loewenstein, and Ted O'Donoghue. "Time Discounting and Time Preference: A Critical Review". *Journal of Economic Literature* 40, no. 2 (2002): 351–401

   - †David Laibson. "Golden Eggs and Hyperbolic Discounting". *The Quarterly Journal of Economics* 112, no. 2 (1997): 443–478

- † Ted O'Donoghue and Matthew Rabin. "Doing It Now or Later". *American Economic Review* 89, no. 1 (1999): 103–124

11. **Other-regarding preferences (Nov. 21th)**

- Elizabeth Hoffman, Kevin McCabe, and Vernon L. Smith. "Social Distance and Other-Regarding Behavior in Dictator Games: Reply". *American Economic Review* 89, no. 1 (1999): 340–341

- Ernst Fehr and Simon Gächter. "Cooperation and Punishment in Public Goods Experiments". *The American Economic Review* 90, no. 4 (2000): 980–994. ISSN: 00028282

- Uri Gneezy and Aldo Rustichini. "Pay Enough or Don't Pay at All". *The Quarterly Journal of Economics* 115, no. 3 (2000): 791–810. Visited on 08/26/2024

- Uri Gneezy and Aldo Rustichini. "A Fine is a Price". *The Journal of Legal Studies* 29, no. 1 (2000): 1–17

12. **Interpreting Experiments & Policies with Behaviroal agents**

- John A. List. "Does Market Experience Eliminate Market Anomalies? The Case of Exogenous Market Experience". *The American Economic Review* 101, no. 3 (2011): 313–317

- John A. List. "On the Interpretation of Giving in Dictator Games". *Journal of Political Economy* 115, no. 3 (2007): 482–493

- C. Sunstein and Richard Thaler. "Libertarian Paternalism Is Not An Oxymoron". *Conference Series ; [Proceedings]* 70 (Feb. 2003)

- Whitman, Glen, Rise of the New Paternalism," Cato Unbound, April 2010, available at http://www.cato-unbound.org/2010/04/05/glen-whitman/rise-new-paternalism.

- Loewenstein, George and Ubel, Peter, Economics Behaving Badly,"
  The New York Times, July 14, 2010.

- †Colin Camerer et al. "Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism"". *University of Pennsylvania Law Review* 151 (Apr. 2003)