ECO331: WINTER 2024
BEHAVIOURAL AND EXPERIMENTAL ECONOMICS

1   THE BIG PICTURE

Section L0101: Monday, 2:10 PM – 5:00 PM, MB128.
Section L5101: Monday, 5:10 PM – 8:00 PM, MS2170.

Contacting me.

email:	robert.gazzale@utoronto.ca
office hours:	Drop in: GE[1] 168: Wednesdays, 4:00 PM – 5:00 PM
	By appointment: in person or online

Other course contacts.

- Teaching Assistant: Garrett Evans (garrett.evans@mail.utoronto.ca)

- Teaching Assistant: Alaina Olson (alaina.olson@mail.utoronto.ca)

- Instructional Support Assistant handling course administrative issues: Jacklyn Rabinovich (jacklyn.rabinovich@utoronto.ca)

Texts and the like.

- **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 assignments	All Year	N/A	12%
Writing for the Week	All Year	N/A	12.5%
Term Test	Mon, February 12, 2024	<2 hours	25%
Term Paper	See below	N/A	25%
Final Examination	TBA	2 hours	25.5%[†]

[†] **A student must earn a 40% on the exam in order to pass the course.**

2   DIVERSITY

Teaching-Team 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 origin, gender and gender

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[1] Max Gluskin House, 150 St. George Street.

identity, sexuality, socioeconomic class, age, religion, and disability. Your suggestions are encouraged and appreciated.

Finally, 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 gender pronouns. Prof. Gazzale 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. The University does not condone discrimination or harassment against any persons or communities.

3   ACCOMMODATIONS

3.1   Accessibility Accommodations

The University provides academic accommodations for students with disabilities in accordance with the Ontario Human Rights Code. This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the University's courses and programs. Students with diverse learning styles and needs are welcome in this course. If you have a disability that may require accommodations, the first step is to contact `Accessibility Services`.

3.2   Religious Accommodations

The University provides reasonable accommodation of the needs of students who observe religious holy days other than those already accommodated by ordinary scheduling and statutory holidays. You have a responsibility to alert us in a timely fashion to upcoming religious observances and anticipated absences that affect your ability to fully participate in this course. We will make every reasonable effort to avoid scheduling compulsory activities at these times.

4   ACADEMIC INTEGRITY

Academic integrity is one of the cornerstones of the University of Toronto. It is critically important both to maintain our community which honours the values of honesty, trust, respect, fairness and responsibility and to protect you, the students within this community, and the value of your degree. According to Section B of the University of Toronto's Code of Behaviour on Academic Matters, it is an offence for students:

- to obtain unauthorized assistance on any assignment;

- to provide unauthorized assistance to another student, including showing another student completed work or revealing the contents of an assessment a student has not yet seen;

- to falsify or alter any documentation required by the University, including, if applicable, the *Verification of Student Illness or Injury* form.

- to use **or possess** an unauthorized aid in any test or exam (e.g., cellphone, graphing or programmable calculator); and

- to continue writing when the time is up in any test or exam.

- **N.B.** Anyone writing when the invigilator announces the end of the test period automatically loses 5% of the total marks available on the test.

There are other offences covered under the Code, but these are by far the most common. Please respect these rules and the values which they protect. I take issues of academic integrity very seriously. As such, I report all suspected cases of academic misconduct to the Department of Economics and Dean's Office. The consequences can be `severe`.

Being unaware of the policies or what is considered unauthorized collaboration (e.g., plagiarism) is not a defence. If you have questions or concerns about what constitutes appropriate academic behaviour, please reach out to me. Please know that the University expects you to seek out additional information on academic integrity from me or from other institutional resources. The University's Academic Integrity website is an excellent source of information. Further, it is a course requirement that you have read University's Code of Behaviour on Academic Matters, especially section B which outlines what are considered academic offences.

4.0.1 Plagiarism

Plagiarism is a potentially serious problem in writing assignments. There will be more details concerning the definition of plagiarism and advice on how to avoid it when we discuss the assignment in more detail. Ignorance of the rules of plagiarism is specifically excluded as a defence. 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 web site (`https://uoft.me/pdt-faq`)."

A note on plagiarism: Academic inquiry is a conversation. Someone makes (publishes) an argument. Others interpret and critique, with the goal of moving forward the frontier of what we "know". **A fundamental goal of this course is to continue your intellectual transition from consumers of to participants in economic inquiry.** This means, for example, that the writing assignments are structured to elicit *your* intellectual contribution. When you plagiarize (i.e., implicitly claim ownership of the intellectual contribution of another by not attributing the idea its originator) you are not a participant in in economic inquiry.

The bottom line is that I want your intellectual contribution, and want to know how it fits into the extant conversation. This requires both your original ideas and interpretations and appropriately crediting the ideas upon which you are building.

4.0.2 Artificial-Intelligence Tools, including Generative AI (e.g., ChatGPT)

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.

5   COURSE OVERVIEW

This is kind of a weird course.

Behavioural economics might best be described as a movement: an effort to incorporate the insights of other social science disciplines (psychology in particular) to appropriately modify and augment the economist's traditional assumptions about human behaviour and preferences. It is motivated by the fact that while models based on traditional assumptions often do rather well in predicting actual outcomes, non-trivial anomalies have been identified which might be reconciled by more "realistic" assumptions about human preferences and behaviour. *That is, by making more realistic assumptions about human behaviour, can we improve the predictions made by economic models?* Experimental economics is defined by method, namely the use of controlled, human-subject experiments. This course concentrates on the intersection of behavioural and experimental economics. Namely, we (mostly) look at controlled experiments which seek to uncover and quantify systematic ways in which people deviate from traditional assumptions.

Even limiting our attention to the intersection of behavioural and experimental economics, the list of possible topics to include in this class is absurdly long. My topic-selection mechanism might best be described as arbitrary and capricious, with perhaps some method to my madness.

5.1   Goals of the Course

I have three overarching goals for 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.

3. **You as Economist** Continue your intellectual transition from "consumers of" to "participants in" economic inquiry. 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.

6   ASSESSMENTS

6.1   In-class assignments

In all 9 lecture meetings after the first class, there will be in-class assignments. These assignments will include:

Writing Prompts Writing prompts will be randomly assigned during class (i.e., may be beginning, middle or end). Responses will be marked very coarsely. The default marking scheme:

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 of 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 is the sum of your eight highest scoring weeks to a maximum of 12%.

What if I miss a lecture because I am hospitalized? If you planned ahead for this possibility, this is no problem because this is the first one you missed. If you previously missed two and find yourself hospitalized for one later in the semester, I am going to guess that you will regret having missed those two previous lectures . . .

Bottom Line: Assume you are going to get Covid later in the semester.

6.2 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 critical engage with the week's readings before lecture. For (almost) every course topic, there is the possibility to submit a Writing for the Week assignment covering 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 Monday, 1:30 PM. Late submission 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 a 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.

6.3 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 tools 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 March 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, March 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 on the peer reviews received, as well as an explanation of any other revisions made between the first and second submissions.

- The weights for 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.

- **N.B.**[2] *Other* students' assessments of the *your* First Submission do not count towards *your* Term Paper grade.

6.3.1   Extensions

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

6.3.2   Late Penalties

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 each subsequent 24 hours.

Peer Assessments 5 percentage points for the first hour. 15 percentage points each subsequent 24 hours.[3]

Final Submission 5 percentage points for the first hour. 10 percentage points each subsequent 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.

6.4   Term Test and Final Exam

If a concept, skill, result or topic is addressed in lectures or the required readings, it is testable.

N.B. My choosing to devote scarce lecture time to a topic or concept is a good indication I find it important. Things I find important have a nasty habit of appearing on tests and exams. While this set of facts **in no way** rules out the inclusion of material not covered in lectures, it may be helpful in prioritizing your preparation.

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[2]Short for the Latin *nota bene*, meaning "note well". Three years of high-school Latin and that is just about the only thing I remember. That and *semper ubi, sub ubi*. I'll give a 0.25% bonus to the first student who emails me a translation.

[3]Lateness determined by the time stamp on the **last** peer assessment submitted.

6.4.1 Makeup Test

If you miss the term test, you must follow this procedure to be eligible to take the make-up test.

- By the start of missed test, complete the *Missed ECO331 Test* form available on Quercus. On this form, you will indicate which documentation supporting your absence you will be providing. 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 an absence declaration via ACORN, you must either i) upload a copy of the declaration to the *Missed ECO331 Test* form; or ii) have it sent to `jacklyn.rabinovich@utoronto.ca` when you complete the declaration on ACORN.

- 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. You must either i) upload a copy of the VOI to the *Missed ECO331 Test* form; or ii) send it to `jacklyn.rabinovich@utoronto.ca`.

- 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 take place on on Friday morning, March 2, 2024. **The makeup term test will be a one-on-one oral test with Prof. Gazzale lasting approximately one-half of an hour.** 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.

6.5 Marking and Appeals

If—after receiving your graded term paper or test and reviewing any suggested solutions—you believe that there is a major error in grading, you can can request a regrade. A Request for Regrade form will be made available one week after the return of the assessment, at which point you have one week to request a regrade. Your request must go beyond "I think I deserve a higher grade." With direct reference to i) your paper and the grading rubric, or ii) your term test and the suggested solutions, you must explain why your score should be higher. The *entire* paper or test will be regraded, which may result in either an increase or decrease of your grade.

N.B. The only time Prof. Gazzale makes an exception to missed term-work policies has been in consultation with an academic advisor from the student's College Registrar's Office. This is particularly relevant for students facing situations whose impact on their studies is longer in duration.

7 Course Details

7.1 Quercus

This course will make heavy use of the Quercus. You are responsible for checking it regularly. Content includes:

- announcements;

- copies of the lecture slides;

- links to required articles, book chapters and handouts.

7.2 Communication

I make important announcements either in lecture, through Quercus, or both. I try to disseminate all important information both online and in-person, but you should not assume that an in-person announcement will be repeated on Quercus and vice-versa. I encourage you to customize your Quercus notification preferences to receive immediate or at least daily notifications of messages and announcements through either email or text.[4]

Email is **not** an appropriate forum for discussing course materials or asking questions about course content. As such, it should be restricted to private matters, or to notify us of a course problem (e.g., broken link, typo, TA issues, etc.).

- Email requirements:

  - Your email must be sent from your official University of Toronto email account.
  - For filtering purposes, the subject line must start with **ECO331**.
  - **Your message must include your student number.**

- Who should you email?

  - For term paper content-related questions, email the TA who is handling your topic.
  - For course administration issues, email the instructional support assistant `jacklyn.rabinovich@utoronto.ca`.
  - For other issues, please email me.

- For messages asking for a reply, if I can answer briefly without explaining course content or revealing something of general interest, then I endeavour to reply within 2 business days. If I do not respond within 3 business days, please re-send the message or contact me in class or office hours.

- I will ignore any request for information easily available in this syllabus or on Quercus.

7.3 Lectures

First and foremost, you are expected to come to class having done the required readings.

During lecture, I may project "PowerPoint" slides. I encourage you to print them and bring them to lecture, or have them available on your tablet or laptop. You will notice that while a set of slides represents a good overview of a topic and contains many of the important definitions, many of the details are missing. During the lecture, we shall fill in the missing details, resulting in "marked-up" slides. **I will not make available the marked-up slides.**

7.4 Doing Well in ECO331

Attend lectures. Do the readings before lecture. Seriously.

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[4]`https://community.canvaslms.com/docs/doc-10624`

8 TENTATIVE SCHEDULE

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

1. **Introduction (Jan. 8)**

   - **Thaler, Richard H.**, "From Homo Economicus to Homo Sapiens," *Journal of Economic Perspectives*, Winter 2000, *14* (1), 133–141.

2. **Experiment Design; Internal & External Validity (Jan. 15)**

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

   - **Gneezy, Uri, Muriel Niederle, and Aldo Rustichini**, "Performance in Competitive Environments: Gender Differences," *Quarterly Journal of Economics*, August 2003, *118* (3), 1049–1074.

   - †**Friedman, Daniel and Shyam Sunder**, *Experimental Methods: A Primer for Economists*, Cambridge University Press, 1994, pp. 1–84.

3. **A Failure to Optimize I: A Smörgåsbord (Jan. 22)**

   - **Kahneman, Daniel**, *Thinking, Fast and Slow*, Farrar, Straus and Giroux, 2011, chapters 1–3, pp. 19–49.

   - **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*, 2000, *79* (6), 995–1006.

   - **Danziger, Shai, Jonathan Levav, and Liora Avnaim-Pesso**, "Extraneous factors in judicial decisions," *Proceedings of the National Academy of Sciences*, 2011, *108* (17), 6889–6892.

   - **Mani, Anandi, Sendhil Mullainathan, Eldar Shafir and Jiaying Zhao**, "Poverty Impedes Cognitive Function," *Science*, August 30, 2013, *341* (6149), 976–980.

4. **A Failure to Optimize II: People and Probabilities (Jan. 29)**

   - **Barberis, Nicholas, Andrei Schleifer, and Robert Vishny**, "A Model of Investor Sentiment," *Journal of Financial Economics*, 1998, *49* (3), 307–343.

   - **Tversky, Amos and Daniel Kahneman**, "Judgement under Uncertainty: Heuristics and Biases," *Science*, 1974, *185* (4157), 1124–1131.

5. **Prospect Theory and the Endowment Effect (Feb. 5)**

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

   - ____ , ____ , **and** ____ , "Experimental Tests of the Endowment Effect and the Coase Theorem," *Journal of Political Economy*, December 1990, *98* (6), 1325–1348.

   - †**Kahneman, Daniel and Amos Tversky**, "Prospect Theory: An Analysis of Decision under Risk," *Econometrica*, March 1979, *47* (2), 263–292.

6. **Midterm Test (Feb. 12)**

7. **More Framing (Feb. 26)**

   - **Thaler, Richard H.**, "Mental Accounting Matters," *Journal of Behavioral Decision Making*, 1999, *12* (3), 183–206.

   - **Fehr, Ernst and Lorenz Goette**, "Do Workers Work More if Wages Are High? Evidence from a Randomized Field Experiment," *The American Economic Review*, 2007, *97* (1), 298–317.

   - **Benartzi, Shlomo and Richard H. Thaler**, "Myopic Loss Aversion and the Equity Premium Puzzle," *The Quarterly Journal of Economics*, February 1995, *110* (1), 73–92.

8. **Term Paper Tutorials (Mar. 4)** Details forthcoming.

9. **Do we even know what we want? (Mar. 11)**

   - **Kahneman, Daniel, Peter P. Wakker, and Rakesh Sarin**, "Back to Bentham? Explorations of Experienced Utility," *Quarterly Journal of Economics*, May 1997, *112* (2), 375–405.

   - **Ariely, Dan, George Loewenstein, and Drazen Prelec**, ""Coherent Arbitrariness": Stable Demand Curves Without Stable Preferences," *Quarterly Journal of Economics*, February 2003, *118* (1), 73–105.

   - †**Gilbert, Daniel T., Elizabeth C. Pinel, Timothy D. Wilson, Stephen J. Blumberg, and Thalia P. Wheatley**, "Immune neglect: A source of durability bias in affective forecasting," *Journal of Personality and Social Psychology*, 1998, *75* (3), 617–638.

10. **Present Bias & Bounded self control (Mar. 18)**

    - **Gazzale, Robert**, *Discounting for Dummies*, 2017.

    - **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*, May 2006, *121* (2), 635–672.

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

11. **Other-regarding preferences (Mar. 25)**

    - **Hoffman, Elizabeth, Kevin A. McCabe, and Vernon L. Smith**, "Social Distance and Other-Regarding Behavior in Dictator Games," *The American Economic Review*, June 1996, *86* (3), 653–660.

    - **Fehr, Ernst and Simon Gächter**, "Cooperation and Punishment in Public Goods Experiments," *The American Economic Review*, September 2000, *90* (4), 980–994.

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

    - **Gneezy, Uri and Aldo Rustichini**, "Pay Enough or Don't Pay at All," *Quarterly Journal of Economics*, August 2000, *115* (3), 791–810.

- **Gneezy, Uri and John A. List**, "Putting Behavioral Economics to Work: Testing for Gift Exchange in Labor Markets Using Field Experiments," *Econometrica*, 2006, *74* (5), 1365–1384.

- †**Akerlof, George A. and Rachel E. Kranton**, "Identity and the Economics of Organizations," *Journal of Economic Perspectives*, Winter 2005, *19* (1), 9–32.

12. **Interpreting Experiments; Paternalism (Apr. 1)**

- **List, John A.**, "Does Market Experience Eliminate Market Anomalies?," *Quarterly Journal of Economics*, February 2003, *118* (1), 41–71.

- **List, John A.**, "On the Interpretation of Giving in Dictator Games," *The Journal of Political Economy*, June 2007, *115* (3), 482–493.

- **Sunstein, Cass R. and Richard H. Thaler**, "Libertarian Paternalism Is Not An Oxymoron," *University of Chicago Law Review*, 2003, *70(4)*, 1159–1202.

- **Whitman, Glen**, "The 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.