

## PHL277: Ethics and Data

### Course Description

This course surveys the fundamental ethical problems raised by the widespread collection of personal data and its use in algorithmic decision-making. We will discuss privacy, algorithmic discrimination, and various other puzzles stemming from the application of machine learning to everyday decision-making.

### Teaching Team

Instructor: Steve Coyne ([steven.coyne@mail.utoronto.ca](mailto:steven.coyne@mail.utoronto.ca)) – he/him

*Biography:* I am an Assistant Professor, teaching stream, in the Departments of Philosophy and Computer Science at the University of Toronto. I am a co-lead and main ethicist/administrator of the [Embedded Ethics Education Initiative](#) in the Department of Computer Science. I earned my PhD in philosophy at the University of Toronto in 2021. Before that, I earned a MA and a couple of bachelor degrees, including a BSc degree in applied mathematics from the University of Calgary. I do research in philosophy of law, political philosophy, philosophy of language, and the ethics of technology (including data ethics!). When I'm not doing philosophy, I like hanging out with my cat, running, and playing strategy and RPG computer games.

*Office Hours:* 5:15-5:45pm on Mondays in JHB 420. Most days, I'm also happy to hang out for a few minutes after class. If neither of these times work, send me an e-mail and we can arrange to meet on Zoom at another time. I will announce additional office hours before the midterm and final exam.

*E-mail:* For written communication, please contact me via e-mail (and not Quercus, which I don't regularly check.) I make every attempt to respond to administrative questions (e.g. about course registration, extensions, etc) within one working day. I'm also happy to answer quick, specific questions about course content by e-mail, but these take longer to think through so it may take me up to several days to get back to you.

Teaching Assistants: Alex de Guzman ([alex.de.guzman@mail.utoronto.ca](mailto:alex.de.guzman@mail.utoronto.ca)), Andrew Doppenberg ([andrew.doppenberg@mail.utoronto.ca](mailto:andrew.doppenberg@mail.utoronto.ca)),

*E-mail:* Please only contact your TA by e-mail for administrative questions or questions about the marking of tests. Please leave questions about course material to tutorial, class or office hours.

### Course Flow

This is an in-person course. We meet on Monday nights from 6:10-8pm in [BL 205](#). Note that we do not have class on October 13 or October 27 because of Thanksgiving and reading week.

I encourage you to regularly attend lecture. While I will post slides before each lecture and an audio recording of the lecture by the next morning, these recordings are intended only to allow students who already attended the lecture to double check details and to provide some coverage for students who were prevented by emergencies from coming to lecture. They are not a good long-term substitute for attending lecture.

I encourage you to print off the slides and take notes by hand. Same with the readings.

You will have tutorial every Wednesday from September 10 to November 26, except October 8, October 15 and October 29 – that is, the weeks containing lectures 1-9. These tutorials are mandatory. They will involve quizzes, groupwork, review and open discussion. Unless you have written permission from me, you must attend the tutorial that you are registered for, even if there appear to be spots open on ACORN in other tutorials. I will allocate any extra spots that become available in earlier tutorials based upon need – please get in touch with me if you have a compelling reason to attend a tutorial that you were not originally enrolled in.

#### Tutorial Information:

TUT5101 (6-7): OI 4418 (with Alex)  
 TUT5102 (6-7): SK 418 (with Andrew)  
 TUT5201 (7-8): OI 4418 (with Alex)  
 TUT5202 (7-8): SK 114 (with Andrew)

#### Readings

We will be reading a mix of classic and contemporary philosophical papers relevant to data ethics. All readings will be accessible through Quercus or online library access.

#### Student Success

Like all philosophy courses, our course material is challenging and the standards on coursework is high. But I want you to profit from the course and to succeed in it. You are very welcome to come and chat with me after class or during my office hours. I'm happy to answer questions or repeat points made in lecture, and more generally talk with you about how your semester is going.

#### Evaluation

Course Component	Percentage of Grade	Date(s) due
Tutorial quizzes	9 x 3% = 27%	Tutorials 1-9
Week 10 quiz	3%	Online, due December 2
Tutorial participation	8%	Every tutorial
Tutorial groupwork	2%	Every tutorial
Midterm	25%	October 6
Final Exam	35%	Sometime in final exam period

*Tutorial quizzes:* In each tutorial, you will have a short multiple-choice quiz about the material covered in class that week (lecture and readings).

*Midterm and Final Exam:* You will complete a midterm and a final exam. The midterm covers the material from lectures 1-4, while the final exam covers the material from lectures 5-10. Each test will consist of two essay questions. The first question will be about some theoretical debate in the ideas and readings that we have covered. The second question will ask you to apply the ideas and readings to a concrete case in data ethics. I will post a detailed marking rubric for each question. You will have an opportunity to submit a practice essay roughly one week before the midterm to receive feedback.

*Tutorial Groupwork:* In each tutorial, you will answer a question in groups and submit an answer in writing. An adequate effort will receive full marks. Individual submissions will not be recorded on Quercus. As long as you come to at least four tutorials and always submit a reasonable effort when you do come to tutorial, you will receive full credit for this component of your grade.

*Tutorial Participation:* You are required to make contributions to verbal discussion in tutorials, worth 1% each (up to a maximum of 8%). Your contribution should show some engagement with the material we are discussing or (better yet) one of your classmates' prior points. This might take the form of a developed question, an objection, or so on. Requests to repeat material, repetitions of points by other students, or questions about class mechanics don't count for points. Please observe the usual norms of class etiquette. Be civil, make sure you raise your hand before making a contribution, and wait for your TA to acknowledge you and give you the floor.

Your TA will be keeping track of your contributions. Note that you can only receive credit towards the 8% for a maximum of two contributions per tutorial, and you will only receive credit for those contributions if you are present for the whole tutorial in question (so don't make your point(s) and then leave right after, please). There will be no opportunity for alternative participation credit apart from very rare cases – e.g. verified multi-week absences and verified accessibility considerations that prevent participation. You are responsible for making sure that you contribute throughout the semester to give yourself a 'buffer' – you should aim to make at least one contribution a tutorial throughout the semester. Because one can earn full marks for participation in as few as four tutorials, additional opportunities for participation credit will not be given even for documented absences.

Your TA will do their best to hear from a variety of voices during tutorial. Occasionally you might have a point that we do not have time to discuss, or someone else gets to your point before you do – we know this can be frustrating, but unfortunately these are unavoidable limitations on discussions in a medium size class. Try to get in early and have back-up points planned!

*Bonus Participation Mark:* One bonus point to final grades may be awarded to students who contribute to tutorial discussion in an exceptionally active, highly thoughtful manner.

### Assignment Policies

*What do I do if I miss tutorial because of illness, etc?*

If you miss tutorial for documented reasons, please write me ([steven.coyne@mail.utoronto.ca](mailto:steven.coyne@mail.utoronto.ca)) with your documentation. (This could be a verification of illness form, registrar's letter or declaration of absence on ACORN.) If accepted, your quiz grade for that week will be recorded as "9" on Quercus. Apart from this, you are entitled to two tutorial absences without documentation – you can use these for personal reasons of any kind. You do not need to write Steve to claim these absences; they will be included in the final grade calculations at the end of the semester. In either case, the weight for excused missed quizzes before the midterm will be transferred over to the midterm; the weight for any excused missed quizzes after the midterm will be transferred to the final exam. This is a fairly generous policy so I will enforce it rigidly: you absolutely need documentation to replace missed quiz grades more than twice, no exceptions.

A couple of tutorial absences should not affect your groupwork and participation grades. The participation scheme is designed so that you do not need to contribute at every tutorial, so missing one or two tutorials will not impact your ability to earn the full 8% as long as you are diligent at the others.

*What do I do if I miss the midterm because of illness, etc?*

You should e-mail me ([steven.coyne@mail.utoronto.ca](mailto:steven.coyne@mail.utoronto.ca)) for accommodation within seven days of the missed midterm. I will generally expect you to have completed a verification of illness form, registrar's letter or declaration of absence on ACORN to be eligible for an accommodation. There will be one opportunity to rewrite the midterm on Wednesday, October 22, from 6-8:15PM, during the times of the tutorials. (Students who rewrite the midterm will be given the quiz for the week at the start of their make-up session.) Any student who also misses the make-up will need to give further documentation to support retaking the midterm a second time, and any further opportunities to retake the test will likely have a different format (likely a 20-minute oral examination).

*What do I do if I miss the final exam because of illness, etc?*

Missed final exams are handled by the Faculty of Arts and Science. You can petition them to write a deferred exam at a later date: <https://www.artsci.utoronto.ca/current/faculty-registrar/petitions/deferred-exams>

*Regrade Policy:* If you have questions about how your tests are graded, please visit your TA at their office hours or contact them by e-mail with a scan of the assignment and clear, specific questions about the grading that make reference to the grading rubric. Please don't fish for marks without a clear reason. If you still disagree with your TA's assessment of your test after talking with them, you can write Steve to ask for a regrade from scratch. (Think of it like a "Court of Appeal".) Please bear in mind that your grade may go up or down (and in some cases historically it has gone down).

*Note:* The 'total' column in the grades section on Quercus does not reflect your current or total grade in the course.

### Accessibility

If you have a disability or health consideration that may require accommodation, please get in touch with me and Accessibility Services (<https://studentlife.utoronto.ca/departments/accessibility-services/>).

### Course Conduct and Academic Integrity

I encourage you to work together in this course. You will profit more from the course if you study together and discuss your ideas with one another, and critique one another's essays once you have written them. However, as a matter of academic integrity, you must follow these rules (as well as any others in our university's academic integrity policy, available at <https://www.academicintegrity.utoronto.ca/>):

- 1) *Groupwork and Individual Participation:* You and your group are expected to be the author of your own work. You are not allowed to use Large Language Models to generate answers to groupwork or prompts for speaking in class. Contributions generated by and read from ChatGPT will not count for participation credit.
- 2) *Tests:* I encourage you to use Large Language Models (e.g. ChatGPT) to study for tests. I plan to give you some ideas for how to do this in class. However, you remain responsible for checking accuracy and originality of their outputs. If the Large Language Model has taken ideas from other sources, you are expected to accurately credit those original sources, otherwise it counts as plagiarism. I do not expect you to give precise citations on tests, but if you do use word-for-word quotes, you must observe standard citation protocols with quotation marks and page numbers.

If you have any questions about these rules, or other elements of the university academic integrity policy, please contact me by e-mail *before* you complete your test ([steven.coyne@mail.utoronto.ca](mailto:steven.coyne@mail.utoronto.ca)). I am more than happy to answer them.

Out of respect for your intellectual work and fairness to the class, I take academic integrity very seriously and make strenuous efforts to verify that my students are respecting it. I forward all suspected violations of academic integrity to administration, who may impose a serious penalty on you.

### Course Schedule

Some of the readings may change, subject to course flow and class interest.

<b>Part 1: Collecting Data</b>	
Lecture 1 – September 8 <i>Informed Consent</i>	<ul style="list-style-type: none"> <li>• A Wertheimer, F.G. Miller, “Payment for research participation: a coercive offer?”</li> <li>• Tutorials begin Wednesday, September 10</li> </ul>
Lecture 2 – September 15 <i>Privacy (part 1)</i>	<ul style="list-style-type: none"> <li>• J.J. Thomson, “The Right to Privacy”</li> <li>• Thomas Scanlon, “Reply to Thomson”</li> <li>• Daniel Solove, “Nothing to Hide Argument”</li> </ul>
Lecture 3 – September 22 <i>Privacy (part 2)</i>	<ul style="list-style-type: none"> <li>• Carissa Véliz, <i>The Ethics of Privacy and Surveillance</i>, chapters 7 and 8</li> </ul>
Lecture 4 – September 29 <i>The Right to be Forgotten / Data Ownership</i>	<ul style="list-style-type: none"> <li>• Rima Basu, “The Value of Forgetting”</li> <li>• Trystan Goetze, “AI Art is Theft: Labour, Extraction, and Exploitation, Or, On the Dangers of Stochastic Pollocks”</li> </ul>
Week of October 6	<ul style="list-style-type: none"> <li>• <b>In-class test (1h50)</b></li> <li>• No tutorials this week</li> </ul>
Week of October 13 - <i>[Thanksgiving]</i>	<ul style="list-style-type: none"> <li>• No classes, readings or tutorials</li> </ul>
<b>Part 2: Using Data</b>	
Lecture 5 – October 20 <i>Manipulation, Autonomy</i>	<ul style="list-style-type: none"> <li>• Susser, Roessler, Nissenbaum. “Online Manipulation: Hidden Influences in a Digital World”</li> <li>• Carissa Véliz, “If AI is predicting your future, are you still free?” (<a href="https://www.wired.com/story/algorithmic-prophecies-undermine-free-will/">https://www.wired.com/story/algorithmic-prophecies-undermine-free-will/</a>)</li> <li>• Make-up midterm from 6-8pm on October 22</li> </ul>
Week of October 27 - <i>[Reading week]</i>	<ul style="list-style-type: none"> <li>• No classes, readings or tutorials</li> </ul>
Lecture 6 – November 3 <i>Gamification</i>	<ul style="list-style-type: none"> <li>• C. Thi Nguyen, “How Twitter Gamifies Communication”</li> <li>• Michael Sandel, Tanner Lectures: What Money Can’t Buy</li> </ul>
Lecture 7 – November 10 <i>Fairness, Bias and Discrimination (part 1)</i>	<ul style="list-style-type: none"> <li>• Benjamin Eldenson, “Treating People as Individuals”</li> <li>• Stanford Encyclopedia of Philosophy, Discrimination (section 2)</li> </ul>
Lecture 8 – November 17 <i>Bias and Discrimination (part 2)</i>	<ul style="list-style-type: none"> <li>• Jeff Larson et al, “How we Analyzed the COMPAS Recidivism Algorithm” (<a href="https://www.propublica.org/article/how-we-analyzed-the-compas-recidivism-algorithm">https://www.propublica.org/article/how-we-analyzed-the-compas-recidivism-algorithm</a>)</li> <li>• Deborah Hellman, “Measuring Algorithmic Fairness”</li> </ul>
Lecture 9 – November 24 <i>Explainability</i>	<ul style="list-style-type: none"> <li>• Kate Vredenburg, “The Right to an Explanation”</li> </ul>
Lecture 10 – December 1 <i>Who should make decisions – algorithms or humans?</i>	<ul style="list-style-type: none"> <li>• Solon Barocas, Moritz Hardt, Arvind Narayanan, <i>Fairness and Machine Learning: Limitations and Opportunities</i>, chapter 2 (<a href="https://fairmlbook.org/legitimacy.html">https://fairmlbook.org/legitimacy.html</a>)</li> </ul>