

# Teaching Dossier

Trystan S. Goetze

Additional information about my teaching, including sample lecture recordings,  
is available on my website:

<https://www.trystangoetze.ca/teaching/>

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## Teaching Statement

My general aims as an instructor are to improve my students' abilities to engage critically and charitably with philosophical arguments and views, to improve their writing skills, and to enable them to make meaningful connections between philosophy and their personal lives.

At Dalhousie University, I taught a computer ethics course for two semesters. This large class (150–200 students) is required for all computer science majors at Dalhousie, many of whom have never taken a philosophy class before, and a significant plurality of whom are international students. Overcoming language barriers—both literal and disciplinary—was therefore a significant challenge. When teaching face-to-face, I employed a method called Team-Based Learning (TBL)<sup>1</sup> to facilitate class discussions and to enable students who were less confident with the material or the language to contribute to and learn from discussions by engaging with their teams. Students were assigned to permanent teams on the basis of their key skills. In their teams, students collaborated on reading quizzes and completed application exercises on realistic case studies. For example, in a unit on the philosophy of privacy, one application exercise asked, 'Would it be unethical for a university to require students to use attendance-tracking apps?' Students discussed this question with reference to the course material in their teams, then debated one another in whole-class discussion. I facilitated these activities with the help of classroom response technology. In course evaluations, students overwhelmingly indicated that these activities were enjoyable and contributed to their understanding of the course material. One student remarked: 'The team-based learning was unique and I had never experienced a method like that in a university course before. Being in a team helped my understanding of the course material because everyone could share their ideas and opinions'. This course was later featured (twice) on the Blog of the American Philosophical Association.<sup>2</sup>

At Harvard, I have continued to teach ethics to computer science students, this time in modules which are distributed across the computer science curriculum and embedded into computer science courses. This approach, which we refer to as 'Embedded EthiCS', enables us to reinforce the varied ways in which ethical issues arise in computer science research and computing professions.<sup>3</sup> A key component is to tie the technical content of the course and the ethical topic of the module together. For example, in a module I taught in an upper-division course on compilers (the type of software which translates human-written source code into the binary code that computers actually run), I began from the observation that many popular compilers are free and open-source projects maintained by volunteers, and used this to launch into a discussion of the potential responsibilities that developers may have to contribute back to these projects, using the tragedy of the commons as an analogy. Another module I taught was in the first year computer science Ph.D. research skills seminar, which includes students with a wide range of research interests. I introduced the cohort to value-sensitive design, a paradigm developed by Batya Friedman and her colleagues to aid developers in considering different values and stakeholders as part of the design process.<sup>4</sup> About 60 minutes of the 75 minute session had students complete a virtual worksheet on a case study in social media design, followed by lengthy whole-class discussion. Student feedback was, again, highly positive.

In sum, my teaching is engaging, multimodal, and effective in meeting my learning goals.

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<sup>1</sup> L.K. Michaelson, A.B. Knight, and L.D. Fink, *Team-Based Learning: A Transformative Use of Small Groups*, Westport, CT: Praeger (2002); K. van Orman, 'Teaching philosophy with team-based learning', *AAPT Studies in Pedagogy* 1 (2015): 61–81.

<sup>2</sup> See <https://blog.apaonline.org/2021/08/18/syllabus-showcase-social-ethical-and-professional-issues-in-computer-science-trystan-goetze/> and <https://blog.apaonline.org/2022/03/01/should-robots-have-rights-it-commander-data-v-the-united-federation-of-planets/>

<sup>3</sup> Grosz, B., et al., 'Embedded EthiCS: Integrating Ethics Across CS Education', *Communications of the ACM* 62.8 (2019): 54–61.

<sup>4</sup> Friedman, B., and D. G. Hendry, *Value-Sensitive Design: Shaping Technology with Moral Imagination*, The MIT Press (2019).

## Diversity Statement

My research, teaching, and academic service reflect my commitment to diversity, equity, and inclusion, which have personal importance to me since coming out as genderqueer. Because a significant portion of my research is connected to these themes—namely, my work on epistemic injustice, as detailed in my Research Statement—I focus on my service and teaching below.

I have a record of providing support for students from underrepresented groups in philosophy, particularly international students. As an international Ph.D. student at Sheffield, I was co-chair of the department's International Students' Society. Under my leadership, we increased the number of social events for international graduate students, including pub nights, coffee mornings, an annual welcome dinner, and field trips to local points of interest, such as the Peak District. Many of these events persist as traditions in the department community to this day. We also organized presentation skills workshops for non-native English speakers: a first-year Ph.D. student from Mexico found this experience highly valuable when preparing for her first talk at the graduate research seminar.

At Dalhousie, when I switched to teaching online during the pandemic, meeting the accessibility needs of all my students was top-of-mind for me. I made no synchronous sessions mandatory and allowed students to determine the timing of these sessions to accommodate time zones (some students were tuning in from India and China). Participation in synchronous sessions did not require the use of a webcam or microphone, to recognize accessibility needs and divides in access to the technology. I was also generous in offering accommodations, and adjusted the course schedule in consultation with the students to reduce burnout. Students reported in course evaluations that the highly organized course design helped them cope with the stresses of working remotely. At the same time, I used the disruption of ordinary teaching to revise my syllabus, incorporating additional discussion of bias in computer systems, ways that social injustices can be replicated and reinforced by AI systems, and computing professionals' responsibilities to mitigate these problems. In end-of-term reflection assignments, students noted that this material was some of the most memorable and eye-opening in the course.

Showing students early on that philosophy is a diverse discipline aids those from underrepresented groups to become confident in their abilities and comfortable identifying with philosophy as a pursuit. This aspect of diversity in teaching takes on additional significance in computer ethics, given the historical marginalization of women and people of colour in STEM fields as well. Accordingly, I consciously choose selections from philosophers and other theorists belonging to minoritized groups, including historically overlooked figures. For example, when I teach computer ethics, I include material from theorists such as Helen Nissenbaum and Batya Friedman on how computer systems can be biased, Safiya Noble on racist and sexist biases that exist in Google Search, and Ruha Benjamin on her concept of the "New Jim Code." I also discuss topics such as gender and racial injustice in the tech industry and inequities in access to computing technologies and the education required to make use of them. Additionally, in recognition of the need for reconciliation and decolonization in philosophy, I have set aside three classes for discussing First Nations ethical systems in my introduction to normative ethics course outline. The readings currently listed are tentative; the actual schedule would be developed in consultation with local knowledge keepers. My hope is that at least one of the sessions would be led by an appropriate member of a local indigenous community.

In sum, my past, present, and planned professional activities demonstrate a consistent commitment to diversity in all aspects of my work as a philosopher.

## Teaching Experience

### HARVARD UNIVERSITY

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- Spring 2023      **Ethics of Computing Technologies.** Upper-division undergraduate, philosophy.
- Fall 2022      **Embedded EthiCS Module:** Seminar on Effective Research Practices & Academic Culture. Doctoral-level graduate seminar, computer science. Topic: Moral and Professional Responsibility in Computing.
- Spring 2022      **Embedded EthiCS Module:** Ph.D. Grad Cohort Research Seminar. Doctoral-level graduate seminar, computer science. Topic: Value-Sensitive Design.
- Fall 2021      **Embedded EthiCS Module:** Compilers. Upper-division undergraduate, computer science. Topic: Do the freedoms of free and open-source software come with responsibilities?

### ATHABASCA UNIVERSITY

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- Summer 2021      **AI Ethics Micro-Credential Certificate.** Co-designer of four courses, with Katrina Ingram of Ethically Aligned AI, Inc. Online, self-paced, aimed at lifelong learners.
- AI Ethics: An Introduction
  - AI Ethics: Data
  - AI Ethics: Machine Learning Models
  - AI Ethics: Roboethics

### DALHOUSIE UNIVERSITY

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- Spring 2021      **Directed Studies in Computer Science.** Senior undergraduate, computer science. Topic: The ethics of privacy policies.
- Fall 2020      **Social, Ethical, and Professional Issues in Computer Science.** Upper-division undergraduate, computer science; cross-listed as lower-division undergraduate, philosophy. Online, asynchronous. Sole instructor.
- Spring 2020      **Social, Ethical, and Professional Issues in Computer Science.** Upper-division undergraduate, computer science; cross-listed as lower-division undergraduate, philosophy. Face-to-face instruction disrupted by COVID lockdown. Sole instructor.

### UNIVERSITY OF SHEFFIELD

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- Spring 2017      **Philosophical Projects 2: Epistemic Injustice.** Senior undergraduate directed studies seminar, philosophy. Sole instructor.
- Fall 2016      **Matters of Life and Death.** First-year undergraduate, philosophy. Co-instructor with Lewis Brooks, Chris Bennett.

- Spring 2016      **History of Ethics.** First-year undergraduate, philosophy. Graduate teaching assistant.
- History of Philosophy.** First-year undergraduate, philosophy. Graduate teaching assistant.
- Fall 2015        **Matters of Life and Death.** First-year undergraduate, philosophy. Graduate teaching assistant.
- Knowledge, Justification, and Doubt.** First-year undergraduate, philosophy. Graduate teaching assistant.
- Spring 2015     **Key Arguments.** First-year undergraduate, philosophy. Graduate teaching assistant.

### **GUEST LECTURES**

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- 2022              **University of Alberta, Honours Seminar in Computer Science.** Senior undergraduate seminar, computer science. Topic: Moral Code: The Importance of Ethics in AI and Computer Science. Co-presenter: Katrina Ingram.
- 2015              **University of Sheffield, Pragmatism & Idealism.** Upper-division undergraduate. Topic: John Dewey's Ethics.

### **SUPERVISION**

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- 2021–22         Melissa Kwan, Joint Concentration in Computer Science and Philosophy, Harvard University. Topic: The epistemology of social media content algorithms.
- 2020–21         Adeolu Ogunnoiki, Honours Computer Science. Topic: The ethics of privacy policies and terms of service.

## Student Ratings of Instruction (Summary)

The following summarizes the results of student evaluations of my courses and teaching. In a few cases, I've edited comments for clarity or to protect student privacy. In cases where there were extensive opportunities for students comments, I've omitted some questions, but included complete comments for the included questions.

### HARVARD UNIVERSITY

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#### PHIL 166 Ethics of Computing Technologies

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##### Course General Questions

	Excellent	Very Good	Good	Fair	Unsatisfactory	Course Mean	Dept Mean	Division Mean
Evaluate the course overall.	45%	27%	18%	9%	0%	4.09	4.43	4.52
Course materials (readings, audio-visual materials, textbooks, lab manuals, website, etc.)	91%	0%	9%	0%	0%	4.82	4.57	4.48
Assignments (exams, essays, problem sets, language homework, etc.)	55%	18%	9%	18%	0%	4.09	4.47	4.43
Feedback you received on work you produced in this course	73%	9%	18%	0%	0%	4.55	4.49	4.49
Section component of the course	100%	0%	0%	0%	0%	5.00	4.42	4.55

##### What were the strengths of this course?

- The readings and the broad overview of topics. The final presentations were also cool.
- The research project and how it was split into milestones. Trystan was also always super accessible and helpful throughout the whole course!
- Trystan is a very kind and well organized instructor and facilitated great class discussion
- I thought the readings were well-chosen and the amount of assignments provided ample opportunity to engage with the content without being overwhelming.
- Trystan facilitates discussion better than most professors when it's obvious people haven't done the reading. The class is best suited for people with some prior knowledge in the topic but really benefits from pulling students in from different disciplines. The flexibility in the final project makes the course stand out from others as one I'm likely to remember after I graduate. The grading structure encourages students to stay current with the weekly readings and keep pace with the final project effectively
- Trystan is a great instructor. While providing structure to the class discussion, he allows a discursive approach and is able to balance the need to discuss the readings with our interest in examining applications to real-life contexts.

- The readings are also very interesting with being fundamental ones, critical to a better understanding of the ethics of computing tech.
- Very interesting, relevant topics for today's problems. Very insightful selection of literature.
- The topic itself is needed in the Harvard curriculum. There were strengths in the readings and growing our philosophical toolbox on how to deal with computer ethics.
- The instructor was responsive to students' thoughts.

### **How could this course be improved?**

- More structure for the class sessions might be helpful. Sometimes, discussion was a bit dry/onesided. Also a bigger overview of the readings might be helpful, or just generally closer engagement with them instead of free discussion. They often turned the class into more of a government class than a philosophy class.
- I think we could've covered some more interesting topics
- not having deadlines on weekends! we brought this up in class about mid-way through the semester and Prof. Goetze immediately moved the deadlines to the middle of the week, which was much better.
- I think the class would benefit from being slightly larger and including people from only CS or engineering backgrounds, also may help with “cliques” forming in the class (not sure if this was just coincidental)
- I would include one writing assignment earlier in semester to get a feel for the style of writing the final paper should match
- Peer reviewing essay drafts early in the semester would be interesting to hear what other students are interested in and perhaps shape syllabus material later in the course
- Perhaps the guest lecturers could follow the format Trystan sets in terms of class discussion? It would also help if their topics are not esoteric and more in the realm of philosophy, rather than situated in real world applications.
- This class is still in its first iteration, so this is to be expected, but there could be more structure to the class. Also more information regarding the final project ahead of time and more structure around that. The discussions felt a little shallow/unrelated to readings and I wish we were able to have more in-depth discussions about the literature assigned to us.
- The lecture and discussion component need to be overhauled completely. I rarely learned anything in class and we bridged on surface level discussions of mainstream platforms like facebook and instagram.
- The instruction of the course was mediocre and unengaging. Instructor brought in multiple guests lecturers, making the semester relatively disjoint

### **Please comment on this person's teaching.**

- Trystan was always very encouraging and open to discuss any idea that we brought up! His guidance on the research project was super helpful – I never felt like he was doing the thinking for me, but rather guiding my thought process. His feedback on our milestones was also really helpful, and I feel like my writing improved under him!
- Trystan provides very helpful feedback and tries to help you develop your own ideas!
- Trystan was a decent lecturer, but not great at facilitating discussions. His office hours are pretty helpful.

- Professor Goetze is amazing. He is very good at guiding discussion so that things never get boring or stuck. His teaching style is a nice mix of theoretical and applied philosophy, so our course discussion combined big theoretical questions with real-world examples. He's not one of those philosophers who would let you fight it out to the death in class and I think that's a huge plus to his teaching style. There's a way to consider different possibilities and deeply think about implications of various choices without getting heated about it. He encourages cool-headed discussion and makes sure that everyone gets to participate (if they want to). He is also just a very nice and kind person, and he makes everyone feel welcome.
- One of the best interactions I've had with a professor in my four years at Harvard. Dr Goetze should be recognized by the University for his efforts to grow the embedded ethiCS program while ensuring the students within the program come from diverse academic, cultural, and professional backgrounds. The kindness and flexibility Dr Goetze exhibited during a personally challenging semester for me made a huge difference.
- Trystan is an excellent instructor, very methodical, calm with a wry sense of humor. He is flexible and is able to respond to our feedback, is highly respectful and established a convivial atmosphere for effective and productive class discussions.
- Trystan did not show a fervor for the course topic nor did he really teach on the topic. He facilitated discussion that was prompted off of student submitted questions. He planned print out activities on basic examples from the readings. He didn't lecture much on the readings, and it would have been nice to get synopses from him to better digest the readings. I suggest start class off with at least a 15 minute lecture so we can actually anything new on the topic of tech ethics. I think he require excellence and multiple assignments from his students without commanding or showing that respect to us as students.

### **Embedded Ethics Module for CS 290 Ph.D. Grad Cohort Research Seminar**

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1. What was one strength of your module instructor?
  - Engaging with the individual groups during the brainstorming was helpful and demonstrated the instructor's interest in how the different groups were approaching the assignment.
  - facilitated a whole-class discussion about VSD in social-media nudging -- this is not easy to do, and Trystan did it quite well
  - friendly and approachable
  - exercise was well-structured
2. What was one thing your module instructor could have done better?
  - Giving an example of a different case quickly before doing the worksheet could help better guide how people interpret the different sections.
  - Trystan could have taken less time responding to slightly off-topic points/questions from other students [student then refers to a specific classmate]
3. My module instructor helped me grow in my understanding of the ethical issue we discussed.
  1. Strongly disagree: 0%
  2. Moderately disagree: 0%



3. Slightly disagree: 0%
4. Neither agree nor disagree: 0%
5. Slightly agree: 25%
6. Moderately agree: 25%
7. Strongly agree: 50%

***Mean: 6.25 / 7***

4. Any other thoughts or feedback?

- Great job!
- Google Slides can be nice for collaboration and presentation, but I found them a little too inflexible in how they limited the number of stakeholders and impacts we brainstormed, and how they incentivized us to limit the number of characters (often losing the nuance of our points)
- I know there's limited time, but I would suggest the use of an "impact cascade" exercise to assist in understanding tech implications. Copying and pasting what I wrote in the other form: [student goes on to describe this exercise in detail]

### **Embedded Ethics Module for CS 153 Compilers**

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Student comments are unedited and complete.

1. What was one concept from the class that you found particularly helpful for thinking about the ethical issues we discussed (if any)?

- Movement of open software
- I like the discussion of Free vs Open Source vs Proprietary
- Navigating copyright licenses
- The difference between different sorts of software usage licenses
- I like the discussion of Free vs Open Source vs Proprietary

2. What was one concept from the class that you found particularly confusing (if any)?

- Na
- Still not sure whether included libraries (of code when linked) compel the compiled product to use those same licenses.

3. My module instructor helped me grow in my understanding of the ethical issue we discussed.

8. Strongly disagree: 0%
9. Moderately disagree: 0%
10. Slightly disagree: 0%
11. Neither agree nor disagree: 0%
12. Slightly agree: 27%
13. Moderately agree: 55%
14. Strongly agree: 18%

***Mean: 6 / 7***

4. What was one strength of your module instructor?

- Great speaker, inclusive, warm

- I think they taught at a good pace and made the concepts clear.
- Really great in terms of relevance, and the case was intriguing!
- very clear and practical, the IP cheatsheet was super helpful
- Strong communication skills and was empathetic

5. What was one thing your module instructor could have done better?

- n/a

6. Any other thoughts or feedback?

- I found the discussion of different types of licensing schemes (like golang) to be very interesting and wish this could have been talked about more.
- One of the better ethiCS modules I've attended. Rivalled only by 2019 CS61 unicode lecture.

## DALHOUSIE UNIVERSITY

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### PHIL 2490 & CSCI 3101 Social, Ethical and Professional Issues in Computer Science, Fall 2020 (sole instructor, online, asynchronous)

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Question (5-point scale)	Instructor Mean	Department Mean (Computer Science)	Department Mean (Philosophy)
The instructor conducted the class / clinical in such a way that I was stimulated to learn.	4.51	3.95	3.99
The instructor organized the class well.	4.60	4.11	4.28
The instructor communicated clearly during the class.	4.67	4.20	4.25
The instructor showed enthusiasm for the subject matter of the class.	4.62	4.29	4.44
The instructor used fair evaluation methods to determine grades.	4.47	4.17	4.02
The instructor provided constructive feedback (considering the class size).	4.32	4.07	4.06
The instructor showed genuine concern for my learning.	4.53	4.11	4.12
Overall, the instructor was an effective teacher.	4.58	4.10	4.19
<i>Overall averages:</i>	4.54	4.13	4.17

Substantive student comments:

1. What are one to three specific things about the course, or the instructor's approach, that especially helped to support your learning?

- I appreciated the general delivery of the course, which was not only very accessible (webcam/microphone usage was not forced or required, time zone differences were taken into account, notes were posted in PowerPoints alongside the lecture videos, etc.) and the instructor was approachable and easy to contact when there were questions about

the assignment material. The essay instructions were always very clear and easy to understand, students were generally given a choice of topics to write about rather than just one topic, and the topics were always current and interesting (for instance, there was a choice to write about the Boeing Scandal). Lectures were always easy to hear, and allowed that students could either take their own written notes by hand or just follow along with the pre-provided lecture slides.

- Trystan was a very engaging professor making all of his videos actually worthwhile to watch. He provided so many resources for students from extra reading to writing strategies, and was also very accommodating when it came to students who were overwhelmed with deadlines.
- The entire course was incredibly well structured and there were very few surprises in terms of course work. Despite the pandemic, I was able to have meaningful discussions with my group, and I felt that my time was respected with the way that the course handled attendance and assignments. This isn't to say that the course was rigid to a fault, either. Early on there was a major schedule shift for group work due dates that was incredibly necessary to accommodate group meeting times. This was implemented quickly and with little issue. Overall the entire course was a joy to take and has been one of the best structured courses I've taken both during online-only sessions and outside of them.

2. What are one to three specific things about the course, or the instructor's approach, that could be changed to better support your learning?

- I think if he can have synchron[ous] lectures, it will help a lot.
- I found everything in this class helpful. The only thing that I would change is the amount of group work every two weeks. I did not always have group members that participated so sometimes it was a bit much, but they were helpful for learning.
- Smaller tutorial like sessions [should be added] to go over class contents and ensure understanding.
- Give more feedback on the assignments. On the essay assignments, only the rubric was used for feedback. It would be helpful if the markers also made comments about the essay.

3. Are there distinctive qualities of the instructor's teaching that you would like to highlight that have helped improve your learning experience in this course?

- He is very responsible. Every time I reach out to him for essay suggestions, he reviews my essays and writes lots of inspiring questions for me to think of. My writing improved a lot.
- He seemed like he enjoyed his job. This is such an important trait for an instructor to have, and it showed in his teachings and knowledge of the subject matter. He said "we love reading your essays" which is the first time I've heard a professor say that. It really meant a lot to me because most professors make jokes about how much they hate grading work.
- I really like how you choose to reflect on the course while you were walking outside. It really was quite different and refreshing means of delivering your reflection to students in the course.

- Every lecture was a joy to listen to. The instructor spoke clearly and engagingly and made every unit's series of lectures a joy to watch. This being said, it must also be noted that the structure of the course into bi-weekly units that were easy to digest made learning and participating easier than any other course I've taken.

**PHIL 2490 & CSCI 3101 Social, Ethical and Professional Issues in Computer Science, Winter 2020 (sole instructor, face-to-face)**

<b>Question (5-point scale)</b>	<b>Instructor Mean</b>	<b>Department Mean (Computer Science)</b>	<b>Department Mean (Philosophy)</b>
The instructor conducted the class / clinical in such a way that I was stimulated to learn.	4.20	4.14	3.92
The instructor organized the class well.	4.08	4.03	4.22
The instructor communicated clearly during the class.	4.28	4.07	4.30
The instructor showed enthusiasm for the subject matter of the class.	4.33	4.32	4.70
The instructor used fair evaluation methods to determine grades.	4.16	4.12	4.29
The instructor provided constructive feedback (considering the class size).	4.04	4.02	4.18
The instructor showed genuine concern for my learning.	4.20	4.00	4.30
The team exercises helped me engage with and understand the course material.	4.04	N/A	N/A
Overall, the instructor was an effective teacher.	4.32	4.02	4.36
<i>Overall averages:</i>	4.20	4.07	4.31

Substantive student comments:

1. What did your instructor do that helped your learning in this course or clinical setting?

- I really liked the team-based approach taken for ethics. I was very hesitant at first because I thought I might get put in a weaker group, but everything turned out okay. The lectures were well-prepared and presented. In light of the COVID-19 situation, I feel that the actions taken were very fair and well-justified.
- The team-based learning was unique and I had never experienced a method like that in a university course before. Being in a team helped my understanding of the course material because everyone could share their ideas and opinions. He also had informative slides and gave good details.
- I thought Dr. Goetze did a tremendous job considering it was his first teaching opportunity. He always came prepared and you could tell he put in a lot of work in his presentations and tophat activities. He is very tech savvy and knows his stuff!

2. Do you have any suggestions for what the instructor could have done differently to further assist you in your learning?

- While I did enjoy the team activities and thought it helped people engage with one another and the material, I may suggest making it worth a bit more so that people are held accountable to their share of work. The questions and analysis questions can be a lot of work at times which I feel should maybe have some more weight behind them. Other than that, I think it is fair to have the essays and exam worth the most!
- My only complaint is that some of the readings (usually the first of each unit) seemed quite lengthy, with certain parts of them feeling useless when it came to the in-class activities. Other than that, the variety of things to read was great.

3. Additional comments:

- He was very supportive when all this COVID-19 things came up. I think he showed real concern and made good choices to help us accommodate for it.

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## UNIVERSITY OF SHEFFIELD

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### PHI 125 Matters of Life and Death (co-lecturer)

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*Note: These questions were solicited by me for training purposes and have no comparison data.*

Question (5-point scale)	Mean
The material was clearly presented in the lectures.	4.7
The material was presented in an organized way in the lectures.	4.6
The instructor delivered the lectures well (eye contact, vocal tone, enthusiasm).	4.7
The material was interesting and useful to me.	4.8
The instructor managed classroom time effectively.	4.7
The instructor encouraged student participation.	4.5
The instructor created an environment that was conducive to learning.	4.7
The instructor respected me and my opinions.	4.7
Overall rating of the instructor.	4.7

Substantive student comments:

- Engaging, humorous, and all together a fantastic lecturer. I look forward to interacting with you again in the future, should the opportunity arise!
- Trystan was a fantastic lecturer, I was beyond impressed by his performance. He was funny, enthusiastic and made incredibly dense and difficult content accessible, clear and interesting. I wish him all the best.
- I was extremely impressed by the quality of Trystan's lectures, particularly with the way he encouraged discussion.

## Sample Syllabus: PHIL 2490 & CSCI 3101 Social, Ethical, and Professional Issues in Computer Science (online, asynchronous, taught Fall 2020)

### Class Meetings

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TERM: Fall 2020

LOCATION: Cyberspace

TIME ZONE: Atlantic (UTC-3:00 before 1 Nov, UTC-4:00 after 1 Nov).

MEETINGS: Asynchronous lectures, online discussions, synchronous weekly streams with the instructor (Fridays, time determined by class poll).

FORMAT: Lecture, online discussion, and individual reading/writing.

LEARNING TECHNOLOGY: All course materials will be hosted on **Brightspace**. The weekly streams will be conducted in **Collaborate Ultra**. See below for information about system requirements.

### Instructor

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Dr. Trystan Goetze (he/they/she)

Banting Postdoctoral Fellow Scholar in Philosophy and Assistant Professor of Philosophy

Office: Working remotely

Email: [trystan.goetze@dal.ca](mailto:trystan.goetze@dal.ca)

Office Hours: Weekly stream (via Collaborate Ultra), email, or audio/video/chat by appointment

### Teaching Assistants

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[Two TAs were assigned to this course. I have redacted their personal information.]

### Course Description

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Computers enable people to do things that our present laws and policies were not formulated to cover (hacking, sharing files on the internet, and companies sharing data). In such cases, people need to be able to decide for themselves the best course of action, and defend such decisions.

This course aims at developing the ethical reasoning skills and sensitivities that computer professionals will need to make good decisions and to justify them. The course includes a general introduction to ethical theories and their use in making and justifying decisions. We then consider various issues and case studies, illustrating the kinds of problems that can arise from the use and misuse of computers and technology: the responsibilities of computing professionals; ethics on the internet (hacking, computer crime, netiquette); privacy and information; intellectual property; social and political issues (digital divide, computers and work, the internet as a democratic technology).

**Prerequisites:** No previous knowledge of computing or of philosophy is assumed. Some familiarity with computers and information technology, philosophical ethics, or argumentative writing would be an advantage.

**Exclusions:** COMP 3090.03

## Learning Outcomes

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By the end of this course, students will:

- In terms of course content:
  - Be able to identify and analyze ethical issues in computer ethics.
  - Have expanded their knowledge of various ethical issues and perspectives on them in computer ethics.
  - Be able to defend and critique specific views and arguments on ethical issues in computer ethics.
  - Understand the importance of professional codes of ethics in the computing and information technology professions, and how to apply them to real-life cases.
  - Understand some of the major theories in philosophical ethics and how to use them in making ethical arguments.
- In terms of transferable skills:
  - Have improved their formal writing skills.
  - Have improved their ability to read and reflect critically on texts in a variety of media.
  - Have improved their ability to work effectively as part of team tasked with solving concrete problems.
  - Have increased their familiarity with business collaboration software.

## Assessment

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Your work for this course comprises the following assignments. Because this course fulfills a writing requirement in computer science, and because it is the norm for coursework in philosophy, the majority of your grade depends on written work. **There will be no midterm or final exams.**

ASSIGNMENT	WEIGHT	NOTES
<b>Quizzes</b>	20% (2% × 10)	Quizzes based on weekly readings. Due Fridays.
<b>Discussion Notes</b>	15% (3% × 5)	Short writing done in teams. Due first Friday of each unit after Unit 0.
<b>Discussion Replies</b>	5% (1% × 5)	Brief replies to discussion notes. Due second Tuesday of each unit after Unit 0.
<b>Post-Discussion Reflections</b>	5% (1% × 5)	Survey to fill out post-discussion. Due second Wednesday of each unit after Unit 0.
<b>Peer &amp; Self Evaluations</b>	5% (0% + 5%)	Formative evaluation due Week 6. Summative evaluation due Week 12.
<b>Essays</b>	50% (25% × 2)	Three essays will be assigned; only your best two count. Due Weeks 5, 9, and 13.
<b>Additional Assignments</b>	0% or bonus	See below.

Brief descriptions of these assignments follow. Marking rubrics and full instructions will be available on Brightspace. For information about late or missed assignments, see the Course Policies section below.

### **Reading Quizzes (2% × 10 = 20%)**

Every week, there is a quiz based on the assigned readings, which is available to complete throughout the week. Quizzes have 10 questions each; you have 20 minutes to complete them. They are open-book and unproctored, but you are expected to take them without assistance from others. Your score will be released automatically the next day. There are 12 quizzes total, but only your best 10 will count towards your final grade. (If you like, consider 2 quizzes of your choice to be optional.) Graded automatically on a points-based scale. Your score will be released immediately; answers will be visible the following week.

### **Discussion Notes (3% × 5 = 15%)**

Each major unit has an activity for you and your team to complete together. These will present an ethical issue related to the present unit based on a real-life example, and ask you to apply course concepts to that scenario in a 350-word blog post. Discussion note questions are released on the first Monday of each unit, and are due by 23:59 on the first Friday of the unit. The professor may highlight some of the best team exercises on the weekly livestreams. Graded using a rubric.

### **Discussion Replies (1% × 5 = 5%)**

After submitting your team's discussion note, you will have a few days to read and think about the posts made by several other teams. Your team must produce a reply of at least 100 words to one other team's discussion note and post it to the discussion board by 23:59 on the second Tuesday of each unit. These replies should briefly raise an objection, complication, counter-argument, alternative perspective, or further development to that presented in the discussion note your team chooses. At your option, you may engage in further discussion. Graded Pass/Fail.

### **Post-Discussion Reflections (1% × 5 = 5%)**

Following the submission of your team's discussion reply you will fill out a reflection survey by 23:59 on the second Wednesday of each unit. The first part of the survey will ask about the answer your team chose, your own personal view, and whether your view changed as the result of your discussion. The answers to these questions will be aggregated and discussed at the weekly livestreams. The rest of the survey will ask you to reflect on how well your team worked together and your own contributions to the project. Graded Pass/Fail.

### **Peer & Self Evaluations (0% + 5%)**

Once in Week 6 and again in Week 12, you are required to evaluate your and your teammates' contributions to the Discussion Notes and Replies. These will take the form of peer and self assessment rubrics and reflection questions. Your evaluations of your peers will be anonymized and aggregated before being returned to them. Part of your grade on these evaluations will be based on your level of engagement with the exercise. The midterm peer evaluation is formative; a component of the final peer evaluation will be how well you responded to the areas for improvement identified by your peers in the midterm evaluation. Graded on a rubric by students; professor reserves the right to make adjustments.



### **Essays (25% × 2 = 50%)**

In response to prompts provided several weeks in advance, you will be assigned three 1,000 word essays applying ethical reflection to a problem relating to cybertechnology. Essay 1 (due Week 5) is about applying the ACM Code. Essay 2 (due Week 9) is about making arguments with the ethical theories. Essay 3 (due Week 13) combines both of these approaches. Graded on rubrics with common elements. **Only your best two out of three essays will count towards your final grade.** (If you like, you may consider one essay of your choice to be optional.)

### **Bonus Assignments**

Several other activities will be assigned over the course of the semester. Completing them is optional but strongly encouraged – doing so will earn you bonus marks!

- *Introduction Message (+1%)*. In the first week of the course, you are asked to post a brief message to the general discussion boards introducing yourself to the class. If possible, please produce a short video recording.
- *Team Contract (+1% × 3)*. You and your team are strongly encouraged to discuss your expectations of one another in Week 1. At your option, you may formalize these expectations in a Team Contract. This is an optional bonus activity, which gives you a structure to set your expectations and accountability mechanisms. There will be two reviews of the team contract – once in Week 3, and once in Week 7 – where you will have the opportunity to reflect on how things are going and adjust your expectations as needed.
- *Bonus Discussion (+1% × 2)*. Unit 6 has no required discussion activities, but you may post a discussion note about the ethics of machine learning for bonus marks. You can also earn bonus marks for making a thoughtful reply to another student's post in this unit.
- *Bonus Reflection (+1%)*. After the final week of classes, you may submit an optional reflection activity about how the course has influenced your thinking and how you will use what you have learned in the future.

### **Course Timetable**

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The following table lists lecture topics, required readings, activities with deadlines, and the amount of progress towards completing the course your submitted work represents. Full details will be posted on Brightspace. It is your responsibility to check this timetable regularly for due dates.

NOTE (29/09/20): In response to student concerns about workload, the deadlines for Discussion Replies and Post-Discussion Reflections have been moved to provide greater flexibility.

NOTE (01/12/20): Deadlines for the End of Term Peer & Self Evaluations and Essay 3 have changed to **18 Dec**.

Unit	Academic Week	Lecture Topics	Readings	Assignments & Due Dates
<b>(0) Introduction</b>	Week 1 (8–13 Sep)	0.0. Introduction to the course 0.1. What is computer ethics? 0.2. Policy vacuums and conceptual muddles 0.3. Socio-technical systems S.0. Using the course website S.1. Plagiarism & academic honesty S.2. Teams & team contracts	• Syllabus • Tavani • Huff	• Introduction message (Fri 11 Sep) • Quiz 0 (Fri 11 Sep) • Team Contract (Sun 13 Sep)
<b>(1) Professional Ethics in Computer Science</b>	Week 2 (14–20 Sep)	1.1. Professions & professional ethics 1.2. Professional ethical failures 1.3. The ACM Code and other ethical codes 1.4. Applying ethical codes S.3. Writing argumentative essays	• New York Times • Cadwalladr & Graham-Harrison • ACM Code • Using the ACM Code	• Quiz 1A (Fri 18 Sep) • Discussion Note 1 (Fri 18 Sep)
	Week 3 (21–27 Sep)	1.5. Professional responsibilities 1.6. Whistle-blowing 1.7. Red Teams	• Gotterbarn • Johnson et al. • Bok • Wood & Duggan	• Discussion Reply 1 (Tues 22 Sep) • Post-Discussion Reflection 1 (Fri 25 Sep) • Quiz 1B (Fri 25 Sep) • Team contract review 1 (Sun 27 Sep)
<b>(2) Philosophical Ethics</b>	Week 4 (28 Sep–4 Oct)	2.1. Why philosophical ethics? 2.2. Resistance to ethical thinking: relativism, egoism, legalism, relativism 2.3. Utilitarianism 2.4 Deontology	• Weston • Abumere • Kranak	• Quiz 2A (Fri 2 Oct) • Discussion Note 2 (Fri 2 Oct)
	Week 5 (5–11 Oct)	2.5. Virtues & vices 2.6. Moral rights 2.7. Foundations, frameworks, lenses	• Giles • Whitbeck & Goetze • Sherwin	• Discussion Reply 2 (Fri 9 Oct) • Quiz 2B (Fri 9 Oct) • Essay 1 (Fri 9 Oct)
<b>(3) Digital Intellectual Property</b>	Week 6 (12–18 Oct)	3.1. What is intellectual property (IP)? 3.2. Philosophical justifications of IP 3.3. Philosophical criticism of IP 3.4. IP and software	• Posner • Chartier • Robinson • Johnson & Miller	• Post-Discussion Reflection 2 (Tue 13 Oct) • Quiz 3A (Fri 16 Oct) • Discussion Note 3 (Fri 16 Oct) • Midterm Peer & Self Evaluation (Sun 18 Oct)
	Week 7 (19–25 Oct)	3.5. Free & open source software 3.6. Piracy & DRM 3.7. Digital IP in Canada	• Stallman • National Research Council • Scassa	• Discussion Reply 3 (Fri 23 Oct) • Quiz 3B (Fri 23 Oct) • Team contract review 2 (Sun 25 Oct)
<b>(4) Privacy &amp; Security</b>	Week 8 (26 Oct–1 Nov)	4.1. What is privacy? 4.2. Value of privacy 4.3. Privacy & democracy 4.4. Privacy law: a brief history	• DeCew • Reiman	• Post-Discussion Reflection 3 (Mon 26 Oct) • Quiz 4A (Fri 30 Oct) • Discussion Note 4 (Fri 30 Oct)
	Week 9 (2–8 Nov)	4.5. Privacy law today: GDPR, PIPEDA 4.6. The ethics of hacking 4.7. Corporate and government data collection	• Wolford • Privacy Commissioner of Canada • Spafford • Garfinkel • Di Cicco	• Discussion Reply 4 (Fri 6 Nov) • Quiz 4B (Fri 6 Nov) • Essay 2 (Fri 6 Nov)
<b>BREAK</b>	9–15 Nov	Fall study break—no course activities.		

<b>(5) Computers and Society</b>	Week 10 (16–22 Nov)	5.1. Digital divides 5.2. Stereotypes, bias, discrimination 5.3. Bias in computer systems 5.4. Algorithms of oppression	• J. Brown • Berghoef • Friedman & Nissenbaum • Noble • Hutson	• Post-Discussion Reflection 4 (Mon 16 Nov) • Quiz 5A (Fri 20 Nov) • Discussion Note 5 (Fri 20 Nov)
	Week 11 (23–29 Nov)	5.5. Computers and the economy 5.6. Digital technologies and social class 5.7. Informing ourselves to death	• Townsend • Carnoy • Postman	• Discussion Reply 5 (Fri 27 Nov) • Quiz 5B (Fri 27 Nov)
<b>(6) Ethics of Machine Learning</b>	Week 12 (30 Nov – 6 Dec)	6.1. What is machine learning? 6.2. Sci-fi issues: robot rights, robot revolutions 6.3. AI as moral decision makers 6.4. AI as social decision makers	• Clark • A. Brown • Benjamin • Kalluri • Coeckelbergh	• Post-Discussion Reflection 5 (Mon 30 Nov) • Quiz 6 (Fri 4 Dec) • Bonus discussion note (Fri 4 Dec)
<b>(7) Reflecting</b>	Double Monday & Exam Period (7–13 Dec)	7.0. Instructor’s reflections on the course	• No readings	• Bonus discussion reply (Tues 8 Dec) • Bonus reflection exercise (Fri 11 Dec) • Essay 3 (Fri 18 Dec) • End-of-Term Peer & Self Evaluation (Fri 18 Dec)

### *Other Important Dates*

- **7 Sep:** Labour Day – University closed.
- **8 Sep:** First day of classes.
- **18 Sep:** Fees due for fall term, last day to register, last day to add fall term courses, last day to drop courses with a full refund.
- **2 Oct:** Last day to change fall term courses from audit to credit and vice versa, last day to drop fall term courses without a grade of “W.”
- **12 Oct:** Thanksgiving Day – University closed.
- **2 Nov:** Last day to drop fall courses with a grade of “W.”
- **11 Nov:** Remembrance Day – University closed.
- **8 Dec:** Last day of classes (Monday schedule).
- **10–20 Dec:** Fall exam period.

### **Course Material**

The course material will be delivered through a combination of readings, pre-recorded lectures, and livestreams with the instructor. Students are expected to review all three of these components, though synchronous participation in the livestreams is not required.

### *Readings*

Philosophy involves a lot of careful close reading of texts, and critical reflection upon the arguments and values expressed therein. In this course, there are multiple readings to prepare each week; on average, this amounts to **about 33 pages per week**, or **about 1–2 hours of reading** (possibly longer for non-native speakers of English). You should also spend some additional time reviewing and taking notes from these readings after viewing their associated lectures and as you write your assignments.

**All readings will be provided on Brightspace; there is no required textbook.** The readings vary from academic research articles to professional articles from computing periodicals to popular magazine pieces. Most lectures have a specific pre-reading associated with them. These readings are required and form the basis of the weekly quizzes. They will also inform your discussion notes and essay assignments. Readings will become available in Brightspace one week before their associated lectures. Supplemental readings will also be provided; these are optional but strongly recommended for further learning about the week's topics.

Students interested in further reading are encouraged to consult the following textbooks as a starting point:

- Deborah G. Johnson and Keith W. Miller, *Computer Ethics*, 4th ed., Prentice Hall (2009).
- Herman Tavani, *Ethics and Technology: Controversies, Questions, and Strategies for Ethical Computing*, 5th ed., Wiley (2015).
- M. David Ermann and Michele S. Shauf, eds., *Computers, Ethics, and Society*, 3rd ed., Oxford University Press (2003).
- Luciano Floridi, ed., *The Cambridge Handbook of Information and Computer Ethics*, Cambridge University Press (2010).

None of these books is required for this course.

### ***Lectures***

Each major unit has **7 lectures** (Units 0 and 6 have only 4 lectures each). Each lecture runs approximately **10–30 minutes in length**. The format of these lectures is pre-recorded videos, available on Brightspace via Panopto. Supplemental lectures on writing skills, teamwork skills, providing constructive feedback, and academic integrity will also be available. Lectures will become available on Brightspace the Monday of the week with which they are associated in the course timetable.

### ***Livestreams***

Each Friday, at a time to be arranged with the class, the instructor will host a **30-minute synchronous livestream** via Collaborate Ultra. During the livestreams, the instructor will answer students' questions (submitted live or before the stream), discuss assignment instructions, highlight recent computer ethics stories in the news, offer study and writing tips, and spotlight some particularly good submissions to the discussion notes and replies. Students have the opportunity to customize the content the instructor will prepare for these streams by submitting questions through optional surveys available each Wednesday. Attending these streams is not mandatory, but is strongly recommended. They will be recorded and posted to Brightspace the following week.

### ***Learning Technology and Minimum System Requirements***

This course will make extensive use of **Brightspace** and **Collaborate Ultra**. Use of these technologies requires a computer or mobile device with an internet connection (preferably high-speed broadband or better) and a modern web browser (preferably Firefox or Chrome). You can find system requirements and other information about these technologies here:

[https://www.dal.ca/academics/online\\_learning/getting-started-.html](https://www.dal.ca/academics/online_learning/getting-started-.html)

Additionally, it is recommended that students choose a preferred messaging platform – such as Discord, WhatsApp, or Signal – to use when communicating with their teammates and peers. It is the student’s responsibility to read, understand, and decide whether to agree to each service’s terms of use and privacy policy.

When connecting to online resources from outside of Canada, students are responsible for ensuring that they are aware of and observing any applicable laws of the country they are connecting from.

While it is recommended that students have a microphone and webcam for communicating with their instructor, TAs, and peers, these devices are not required to take this course or to participate in any synchronous activities.

Not having a stable internet connection or a system with the minimum requirements may impair your ability to engage in course activities. Please contact the instructor as soon as possible if this situation applies to you.

The course material is provided online for your personal education purposes only. Copying or distributing course material outside of the course website may be a violation of copyright law. If you have questions regarding copyright, contact the Copyright Office: [copyright.office@dal.ca](mailto:copyright.office@dal.ca)

### ***Writing Support at the University Writing Centre***

Learning to write well contributes to the quality of critical thought, good marks, completion of degrees, and, later, success in the workplace. Now is the time to improve your writing skills. You can visit the Writing Centre online **for assistance with your assignments**. Staff and tutors help you to understand writing expectations and disciplinary writing conventions. Staff with graduate-level experience in philosophical writing are available to assist you.

To book an appointment email [writingcentre@dal.ca](mailto:writingcentre@dal.ca). The Writing Centre is completely online this fall.

In addition, the Centre offers **monthly seminars**. This year the online seminars focus on understanding academic integrity and learning to integrate source material into your writing assignments. Email Dr. Adam Auch for more information.

The Writing Centre, also, provides an online learning tool called the **Academic Integrity Module (AIM)**. Self-register at [https://www.dal.ca/campus\\_life/academic-support/writing-and-study-skills/academic-integrity-module.html](https://www.dal.ca/campus_life/academic-support/writing-and-study-skills/academic-integrity-module.html). *New this year online*: after you have completed the AIM, arrange a **follow-up session** to discuss the scenarios more fully. Write to Janice Eddington ([Janice.eddington@dal.ca](mailto:Janice.eddington@dal.ca)) to arrange the session.

Visit the Writing Centre’s **Resource Guide** at <http://dal.ca.libguides.com/writingcentre> for online guidance.

### **Course Policies**

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The following policies govern this course. It is your responsibility to read, understand, and follow them; the instructor will do the same. In case of conflict with Department, Faculty, or University Regulations, the Regulations supersede the policies in this syllabus.

## **University Academic Honour Statement**

Academic integrity is a commitment to the values of learning in an academic environment. These values include honesty, trust, fairness, responsibility, and respect (International Center for Academic Integrity, *The Fundamental Values of Academic Integrity*, 2nd ed.). All members of the Dalhousie community must acknowledge that academic integrity is fundamental to the value and credibility of academic work and inquiry. We must seek to uphold academic integrity through our actions and behaviours in all our learning environments, our research, and our service.

## **Culture of Respect in Computer Science**

We believe inclusiveness is fundamental to education. We stand for equality. Disrespectful behaviour – like misogyny – in our classrooms, on our campus and in our community is unacceptable. If you have witnessed inappropriate behaviour, are not sure what is acceptable, are quite sure you heard inappropriate comments but are unsure of what to do, or just need someone to talk to, you may contact Christian Blouin (Professor and Associate Dean, Academic, Computer Science) [cblouin@cs.dal.ca](mailto:cblouin@cs.dal.ca), or Margie Publicover (Faculty of Computer Science Navigator) [margie@cs.dal.ca](mailto:margie@cs.dal.ca). For more information about Culture of Respect in Computer Science: <https://www.dal.ca/faculty/computerscience/about/respect.html>

## **Peer Course Representative**

The Faculty of Computer Science appoints a student representative for each course. The course representative is a point of contact to facilitate and provide more timely feedback mechanisms to instructors and to the Faculty of Computer Science. Additionally, course representatives can assist peers in navigating to the most appropriate support mechanism on campus. You can think of the course representative as “the middle person”; a neutral point of contact for students to use when they don’t feel comfortable addressing an issue with the professor directly.

## **Contacting the Instructor & Teaching Assistants**

The instructor’s primary way of contacting you with messages about the course will be via announcements on Brightspace. You should check the course homepage frequently. Unless it is urgent, these messages will not normally be cross-posted to the class email list. It is recommended that you configure your Brightspace notifications to push course announcements to your email.

To contact the instructor or a TA, please send them an email to the address(es) listed on the first page of this syllabus. Messages with “PHIL 2490” or “CSCI 3101” in the subject line will receive a reply within 2 business days. Please send correspondence about the course only from your Dalhousie email address, to the instructor’s or TAs’ Dalhousie email addresses. Do not contact the instructor or TAs on their phones, at their personal emails, or on social media platforms (unless you are instructed otherwise), and do not use your personal email for messages about the course.

## **Virtual Office Hours**

The instructor and TAs are available for meetings of 10–30 minutes by audio or video call for discussion of course material, deliverables, study skills, writing skills, or general academic inquiries. Send an email to request an appointment.

Every Friday, there will be an optional synchronous livestream with the instructor (see above). You will have the opportunity to submit questions about the material in advance.

### **Requesting Extensions**

Please refer to the Late and Missed Evaluations policy, below, for information about requests for extensions on assigned work. Failure to follow that policy will result in an automatic rejection of your extension request.

### **Grade Appeals**

If you feel that the grade you received on an evaluation was unfair, you may contact the grader to discuss your concerns. If you find the grader's explanation of your grade unsatisfactory, you may contact the instructor to request a re-assessment. The instructor will discuss your concerns with the grader and determine whether any adjustments are warranted. **Do not abuse this privilege.** Appeal only if you are certain you have been treated unfairly and can defend your claim with good reasons. (In practice, I have found that most re-assessments produce the same grade or lower.)

### **Teamwork No-Shows**

Not contributing to team assignments and expecting to get the grade from your teammates' work is unacceptable freeloading and a breach of academic honour and integrity. In the event that members of your teams did not contribute *at all* to specific assignments (or all semester), inform the instructor. Provide some evidence of their non-participation, such as the transcript for your group chat. The instructor will review the evidence and adjust no-show teammates' grades accordingly.

### **Late and Missed Evaluations**

The following policies will govern how extensions and accommodations for late or missed work are handled in this course. They are based on the university regulation "Missed or Late Academic Requirements due to Student Absence," which you should review and understand: [https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/university\\_secretariat/policy-repository/Student%20Absence%20Regulation%20\(May%202018\)%20\(3\).pdf](https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/university_secretariat/policy-repository/Student%20Absence%20Regulation%20(May%202018)%20(3).pdf)

**In the absence of extenuating circumstances**, the following policies apply for late submission of coursework:

- Late submissions of **reading quizzes** will not be accepted. Missed quizzes will receive a grade of zero.
- Late or missed **discussion notes, discussion replies, or post-discussion reflections** will receive a grade of zero.
- Late or missed **peer and self evaluations** will result in a cumulative –25% penalty (once for missing the formative midterm evaluations, once for missing the end-of-term evaluations) to your grade on the end-of-term peer and self evaluations.
- Late submissions of **essay assignments** will receive a cumulative penalty of –10% to the base grade for each time the clock strikes midnight after the 23:59 deadline, to a maximum of –30%. After 72 hours, your grade reverts to zero and no late submission will be accepted.

**Short-term Absences (first two).** If illness or other extenuating circumstances (such as family care duties, personal emergencies, or legal obligations) result in a short-term (three days or shorter) inability to engage with the course activities, you may notify the instructor by email before any deadlines, then complete a **Student Declaration of Absence (SDA) Form** and submit it via the drop box on Brightspace within three days of the end of the absence. This form takes the place of a sick note, and does not require a signature from a medical professional or other authority, nor are you required to divulge confidential information about the nature of your absence. You are responsible for informing your group members of your absence. The form can be downloaded from the following link, or from the Syllabus, Supplemental Lectures, Handouts, and Forms module on the course Brightspace site:

<https://cdn.dal.ca/content/dam/dalhousie/pdf/campuslife/Health%20and%20wellness/FINAL%20Student%20Declaration%20of%20Absence%20Form.pdf> Upon being notified of your absence, the instructor may suggest an extension or other accommodation, if appropriate. The instructor is not required to offer an extension. If an extension is granted, a second extension will not be granted on the same assignment. Retroactive extensions – i.e. extensions requested *after* the due date – will not be granted without a letter from your Academic Advisor or Program Coordinator supporting the retroactive extension. The following regulations govern the use of SDA forms:

- You must notify the instructor of the absence before the deadlines of work you will miss.
- You must submit an SDA form no later than three days after the last day of the absence.
- The form may only be used for short-term absences (three days or shorter).
- You may use this form a maximum of two times for this course.
- Submitting the form does not guarantee that you will receive an extension, exemption, or alternative assessment – this is the instructor’s sole discretion.
- A record of this form will be kept on file and will fall under Freedom of Information and Protection of Privacy (FOIOP) regulations.
- Knowingly providing false information or identification on an SDA is an academic offence (misrepresentation), subject to university discipline (per University Regulations and Section 7 of Dalhousie’s Code of Student Conduct).

**Third Short-term Absence.** You must notify the instructor before any deadlines you will miss, then meet with your Academic Advisor or Program Coordinator to discuss your situation before the instructor will consider making further alternative arrangements. A letter from your Advisor or Coordinator with the Advisor’s or Coordinator’s recommendations will be required before accommodations can be made.

**Long-term Absence (first).** For an absence longer than three days, you must notify the instructor no later than five days after the last day of the absence. If you will miss any deadlines, again, you must inform the instructor before the work is due. If the absence was caused by a physical or mental health condition, you must supply documentation signed by a primary health care professional. Documentation should indicate the dates and duration of the condition (confidential health information of the exact condition is *not* required), when possible should describe its impact on your ability to fulfill academic requirements, and include any other information the primary care health professional considers relevant and appropriate. For other kinds of extenuating circumstances resulting in a long-term absence, another kind of official documentation providing similar information is required. The instructor will use this information



to determine whether to offer an extension, exemption, or alternative assessment. Again, no special arrangements are guaranteed.

***Second Long-term Absence.*** You must meet with your Advisor or Coordinator to discuss your situation before the instructor will consider making further alternative arrangements. A letter from your Advisor or Coordinator regarding this discussion and the Advisor's or Coordinator's recommendations will be requested.

### **Accessibility & Accommodations**

The following statements are taken from the university's Student Accommodation Policy and the Student Accessibility Centre's guidelines and protocols, which you should review and understand in full:

[https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/university\\_secretariat/policy-repository/StudentAccomPolicy\\_rev%20Apr%202019.pdf](https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/university_secretariat/policy-repository/StudentAccomPolicy_rev%20Apr%202019.pdf)

<https://cdn.dal.ca/content/dam/dalhousie/pdf/campuslife/student-services/academicsupport/Accessibility/SAC%20Guidelines%20and%20Protocols%20document.pdf>

Students are encouraged to seek accommodation where they believe that they are experiencing a barrier to participation in a University activity, due to a characteristic protected under human rights legislation, which may be reduced or eliminated through accommodation. All requests for accommodation shall be made by the student to the Student Accessibility Centre in accordance with the Procedures and with all Guidelines and Protocols published by the Centre.

Accommodation requests shall be made prior to the University activity in question. There shall be no "after-the-fact" accommodation except in rare circumstances where significant psychological or mental health issues arise coincident with the activity in question. All documentation relating to a request for accommodation, including supporting documentation, shall be treated as strictly confidential, and shall not be disclosed to other persons without the consent of the student requesting the accommodation, except to the extent that such disclosure is necessary for the effective implementation of the accommodation decision or appeal of that decision.

The following could be implemented as part of the student's accessibility plan:

- i. Additional time and quiet space to write quizzes, tests, exams
- ii. Alternate exam formats
- iii. Alternate modes of course delivery or evaluation
- iv. Provision of a note taker or interpreter
- v. Special equipment in classrooms
- vi. Adaptive technology

The Student Accessibility Centre requires a minimum of seven days to fulfill student requests.

### **Plagiarism & Academic Integrity**

Plagiarism is representing the work of others as your own, whether or not you intend to do it. This includes but isn't limited to submitting an assignment written by someone other than you (whether or not you paid them for it) or copying a work in whole or in part and submitting it as if you wrote it (whether or not the copied text is protected by copyright). I take these and related

breaches of academic conduct (such as cheating) extremely seriously. Why? (1) Plagiarism and cheating are types of theft, dishonesty, and fraud – that is to say, they’re unethical. (2) Committing such an offence defeats the whole reason you are here, namely, to learn. (3) Doing so is disrespectful to me, as your teacher, to your peers, who are putting in the effort to succeed honestly, and to the university itself, as an institution of higher learning.

If your circumstances ever reach a point where you are tempted to cheat, or if you simply don’t understand how to follow the rules, I urge you to contact me, a TA, your Academic Advisor, or the appropriate support services (listed in SECTION B, below). Let us help you out! We want you to succeed honestly. Don’t jeopardize your grade or your degree!

**Plagiarism Checking.** By default, your essays will be submitted to the Urkund plagiarism detection tool to compare them with a database of previously created work. At the instructor’s option, your discussion notes and replies may also be sent for processing by Urkund. Reports generated by Urkund will be used by the instructor to identify possible instances of plagiarism or other forms of academic dishonesty. In accordance with the University Policy on Student Submission of Assignments and Use of Originality Checking Software, you may inform the instructor, no later than the Add/Drop date (in Fall 2020, 18 Sep), if you prefer not to have your assignments processed by Urkund, so that the instructor and TAs can prepare alternative means of scrutinizing your work for plagiarism. You should read and understand Urkund’s terms of service, particularly their privacy policy, before submitting your assignments. For more information, visit their website: <https://www.orkund.com/>

**Disciplinary Procedures.** It is your responsibility as a student to read, understand, and follow the university’s regulations governing academic integrity. In addition to the resources listed below in SECTION B, the “Examples of Plagiarism” handout posted to the course web page in Brightspace, and the supplemental lecture “S.1. Plagiarism and Academic Honesty,” it is your responsibility to familiarize yourself with the following guidelines and procedures:

**Academic Integrity:** [https://www.dal.ca/dept/university\\_secretariat/academic-integrity.html](https://www.dal.ca/dept/university_secretariat/academic-integrity.html)

**Plagiarism and Cheating:** [https://www.dal.ca/dept/university\\_secretariat/academic-integrity/plagiarism-cheating.html](https://www.dal.ca/dept/university_secretariat/academic-integrity/plagiarism-cheating.html)

**Other Cheating:** [https://www.dal.ca/dept/university\\_secretariat/academic-integrity/plagiarism-cheating/other-cheating.html](https://www.dal.ca/dept/university_secretariat/academic-integrity/plagiarism-cheating/other-cheating.html)

**Discipline Process and Penalties:** [https://www.dal.ca/dept/university\\_secretariat/academic-integrity/plagiarism-cheating/discipline-process.html](https://www.dal.ca/dept/university_secretariat/academic-integrity/plagiarism-cheating/discipline-process.html)

## Final Grades

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Your final grade will be calculated as a score out of 100, and converted to a letter grade using the following table, adapted from the Dalhousie Grade Scale and Definitions:

[https://www.dal.ca/campus\\_life/academic-support/grades-and-student-records/grade-scale-and-definitions.html](https://www.dal.ca/campus_life/academic-support/grades-and-student-records/grade-scale-and-definitions.html)

A+	A	A–	B+	B	B–	C+	C	C–	D	F
90–100	85–89	80–84	77–79	73–76	70–72	65–69	60–64	55–59	50–54	0–49

Please note that the Faculty of Computer Science requires students with a first major in computer science or applied computer science to achieve a final grade of C or better in required computer science courses.

## **Section B: University Policies, Statements, Guidelines, and Resources for Support**

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This course is governed by the academic rules and regulations set forth in the University Calendar and the Senate:

<https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=105&chapterid=6323&loadusercredits=False>

### **University Statements**

***Academic Integrity.*** At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. Read more:

[http://www.dal.ca/dept/university\\_secretariat/academic-integrity.html](http://www.dal.ca/dept/university_secretariat/academic-integrity.html)

***Accessibility.*** The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of: a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (NS, NB, PEI, NFLD). Read more:

[https://www.dal.ca/campus\\_life/academic-support/accessibility.html](https://www.dal.ca/campus_life/academic-support/accessibility.html)

***Student Code of Conduct.*** Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution. Read more: [https://www.dal.ca/campus\\_life/safety-respect/student-rights-and-responsibilities/student-life-policies/code-of-student-conduct.html](https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/student-life-policies/code-of-student-conduct.html)

***Diversity and Inclusion – Culture of Respect.*** Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). Read more: <http://www.dal.ca/cultureofrespect.html>

***Recognition of Mi'kmaq Territory.*** Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Contact the program at [elders@dal.ca](mailto:elders@dal.ca).

### **University Policies and Programs**

***E-Learning website.*** <http://www.dal.ca/dept/elearning.html>

***Important Dates in the Academic Year*** (including add/drop dates).

[http://www.dal.ca/academics/important\\_dates.html](http://www.dal.ca/academics/important_dates.html)

***University Grading Practices: Statement of Principles and Procedures.***

[https://www.dal.ca/dept/university\\_secretariat/policies/academic/grading-practices-policy.html](https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html)

***Scent-Free Program.*** <http://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html>

### **Learning and Support Resources**

***General Academic Support – Advising.*** Halifax: [https://www.dal.ca/campus\\_life/academic-support/advising.html](https://www.dal.ca/campus_life/academic-support/advising.html) • Truro: <https://www.dal.ca/about-dal/agricultural-campus/student-success-centre/academic-support.html>

***Fair Dealing Guidelines.*** <https://libraries.dal.ca/services/copyright-office/guidelines/fair-dealing-guidelines.html>

***Dalhousie University Library.*** <http://libraries.dal.ca>

***Indigenous Students.*** [https://www.dal.ca/campus\\_life/communities/indigenous.html](https://www.dal.ca/campus_life/communities/indigenous.html)

***Black Students.*** [https://www.dal.ca/campus\\_life/communities/black-student-advising.html](https://www.dal.ca/campus_life/communities/black-student-advising.html)

***International Students.*** [https://www.dal.ca/campus\\_life/international-centre.html](https://www.dal.ca/campus_life/international-centre.html)

***Student Health Services.*** [https://www.dal.ca/campus\\_life/health-and-wellness.html](https://www.dal.ca/campus_life/health-and-wellness.html)

***Counselling.*** [https://www.dal.ca/campus\\_life/health-and-wellness/frequently-asked-questions-august-2017.html](https://www.dal.ca/campus_life/health-and-wellness/frequently-asked-questions-august-2017.html)

***Copyright Office.*** <https://libraries.dal.ca/services/copyright-office.html>

***Dalhousie Student Advocacy Services.*** <http://dsu.ca/dsas>

***Dalhousie Ombudsperson.*** [https://www.dal.ca/campus\\_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html](https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html)

***Writing Centre.*** [https://www.dal.ca/campus\\_life/academic-support/writing-and-study-skills.html](https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html)

***Faculty or Departmental Advising Support: Studying for Success.***  
[http://www.dal.ca/campus\\_life/academic-support/study-skills-and-tutoring.html](http://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html)

## Sample Course Outlines

### LOWER DIVISION – INTRODUCTION TO NORMATIVE ETHICS

Which action would be good or bad? What does it mean to be a good person? What is the nature of evil? What do I owe to my fellow human beings and to other living things? How can we make our society more just? These are some of the questions that moral philosophy – or ethics – is concerned with. In this course, we’ll examine these and other philosophical questions by engaging with historical and contemporary texts. Students will learn about eight major traditions in moral philosophy: consequentialism, deontology, virtue and vice ethics, human rights, care ethics, existentialism, sentimentalism, and the ethical systems of the First Nations of Turtle Island (North America). [The First Nations component of this course will be co-developed with local indigenous knowledge keepers. The content under that unit should be considered a placeholder.]

#### Course Schedule

Week	Topic	Reading	Due Dates
1	Introduction to philosophical ethics	Syllabus	
	Consequentialism – The Mills’s Utilitarianism	<ul style="list-style-type: none"> <li>• John Stuart Mill, <i>Utilitarianism</i>, Ch. 1–2.</li> <li>• Optional: Dale E. Miller, “Harriet Taylor Mill,” <i>Stanford Encyclopedia of Philosophy</i></li> </ul>	iRAT_0 tRAT_0
2	Consequentialism – Acts and Rules	Richard Brandt, “Actual Rule Utilitarianism”	
	Consequentialism – Consequences for Animals	Tyler M. John and Jeff Sebo, “Consequentialism and Nonhuman Animals,” in <i>The Oxford Handbook of Consequentialism</i>	Discussion_0
3	Deontology – Kant	Immanuel Kant, <i>Groundwork of the Metaphysics of Morals</i> , section 1	iRAT_1 tRAT_1
	Deontology – Kant, continued	Immanuel Kant, <i>Groundwork of the Metaphysics of Morals</i> , section 2	
4	Deontology – Lying within the moral law	Christine Korsgaard, “The Right to Lie: Kant on Dealing with Evil”	Discussion_1
	Virtues and Vices – Aristotle	Aristotle, <i>Nicomachean Ethics</i> , books I–III	iRAT_2 tRAT_2
5	Virtues and Vices – Virtue under oppression	Lisa Tessman, <i>Burdened Virtues</i> , introduction and ch. 1	
	Virtues and Vices – Can virtue ethics help with moral dilemmas?	Rosalind Hursthouse, “Virtue Theory and Abortion”	Discussion_2
6	Sentimentalism – Hume	David Hume, <i>A Treatise of Human Nature</i> , Book III, Part I, ch. 1–2	iRAT_3 tRAT_3
	Sentimentalism – Emotivism	Alfred Jules Ayer, <i>Language, Truth, and Logic</i> , selections	
7	Interlude – Is moral philosophy misguided?	Susan Wolf, “Moral Saints”	Midterm Paper

	Indigenous Ethics – Hopi ethics	Maria Glowacka, “The Metaphorical Dimensions of Hopi Ethics”	
8	Indigenous Ethics – Contributions to the American experiment	Donald A. Grinde, Jr., and Bruce E. Johansen, <i>Exemplar of Liberty: Native America and the Evolution of Democracy</i> , selections	Discussion_3
	Indigenous Ethics – Special guest: a local knowledge keeper	TBD	
9	Human Rights – Wollstonecraft	Mary Wollstonecraft, <i>A Vindication of the Rights of Woman</i> , ch. 1–2	iRAT_4 tRAT_4
	Human Rights – Locke	John Locke, <i>Second Treatise of Government</i> , selections	
10	Human Rights – Disability	Inga Bostad and Halvor Hanisch, “Freedom and Disability Rights: Dependence, Independence, and Interdependence”	Discussion_4
	Existentialism – Nietzsche	Friedrich Nietzsche, <i>Genealogy of Morality</i> , part 1	iRAT_5 tRAT_5
11	Existentialism – de Beauvoir	Simone de Beauvoir, <i>The Ethics of Ambiguity</i> , selections	
	Care Ethics – Gilligan	Carol Gilligan, <i>In a Different Voice: Psychological Theory and Moral Development</i> , selections	
12	Care Ethics – Noddings	Nel Noddings, <i>Caring: A Relational Approach to Ethics and Moral Education</i>	Discussion_5
	Review & Open Discussion		Peer & Self Evaluations
<b>Exams</b>	Formal written exam: short answer and essay questions		

## Schedule of Assessments

A breakdown of planned assignments for the course.

### **Team-Based Learning (25%)**

This course employs a method called Team-Based Learning (TBL). Students are assigned to permanent teams of about 4–5 people throughout the semester. These teams complete a series of assignments together in class, including contributing to whole-class discussion. Teams will be *ad hoc* in Weeks 1–2 to accommodate the add/drop period. Permanent teams will be finalized by Week 3.

*Readiness Assurance Tests (1% \* 5 + 1% \* 5 = 10%)*. These are reading quizzes with 5 multiple choice questions each. Their purpose is to encourage students to complete the assigned readings *before* the class sessions that depend on that background. RATs cover *all* of the assigned readings for a unit; shorter units will be combined with others. There are two components to each RAT: an individual RAT, or iRAT, which students complete individually; and a team RAT, or tRAT, which students complete in their teams. Each iRAT and tRAT is worth 1% towards the final grade. The first RATs (iRAT\_0 and tRAT\_0) are to familiarize students with the format, and do not count towards the final grade.

*Discussion Assignments (2% \* 5 = 10%).* These are short answer assignments. Students will be given a discussion question to work on in-class. Over the course of the unit, each team will build the outline of an essay in response to the question. The whole class will discuss the teams' answers. These must be submitted at the end of the final class of a unit.

*Peer & Self Evaluations (5%).* At the end of the course, students will evaluate their teammates' contributions to their discussions, as well as their own, and provide constructive feedback. A formative Peer & Self Evaluation is due as an additional attachment to the Midterm paper.

### **Midterm Paper (35%)**

A midterm paper of approximately 1,500 words is due by the beginning of Week 7. Students will be given a choice between several essay questions to answer.

### **Exam (40%)**

There will be a formal written exam for this course. It is comprehensive, covering the entirety of the course readings, lectures, and discussions, but weighted slightly in favour of the latter half. It will consist of short answer questions and an essay question. Students may bring only approved materials. The exam will be 2 hours in length, but the questions will be designed such that it should be possible to complete the exam in about 90 minutes.

## LOWER DIVISION – IMAGINING ARTIFICIAL INTELLIGENCE AND ROBOTICS

Though the term ‘artificial intelligence’ was first coined in 1956, human beings have dreamt of creating intelligent machines for centuries. In this course, we will uncover the rich history of both artificial intelligence and robotics, and reflect on philosophical themes around the nature of intelligence, life, personhood, and humanity. We will begin with historical and mythical automata of ancient Greece and work our way through the Islamic golden age toward the modern era of artificial intelligence research. This historical picture will be complemented by an examination of current advances in AI and robotics in a number of different fields, including policing, high-frequency trading, art, agriculture, law, and advertising. Along the way, we will also pay close attention to the philosophical, social, and ethical implications posed by these technological developments and their applications to nearly every aspect of modern life. We will also learn how to make a simple AI-enabled system using IBM’s Watson Assistant.

### Course Schedule

The course meets synchronously (online or in person) twice a week for 80 minute sessions.

Week	Topic	Reading	Due Dates & Quizzes
1	<b>Prelude</b>	• Syllabus	
	<b>Frameworks &amp; Concepts:</b> Robots and AI as sociotechnical systems	• Ibo van de Poel, ‘Embedding Values in Artificial Intelligence (AI) Systems’	iRAT_0
2	<b>Frameworks &amp; Concepts:</b> What do we mean by ‘intelligence’?	• Mary Midgley, <i>What is Philosophy For?</i> (selections)	
	<b>Frameworks &amp; Concepts:</b> Making your own AI	• Video: Stefania Kaczmarczyk, <a href="#">Building Bots with Watson Conversation</a>	
3	<b>Interlude:</b> Meeting your teams	• Handout: Working in teams • Handout: Chatbot assignment brief	TeamContract
	<b>Robots in Myth and Early Science Fiction:</b> Greek, Jewish, and Chinese Myths and Legends	• Adrienne Mayor, <i>Gods and Robots</i> , (selections on Talos and Galatea) • David Wisniewski, <i>Golem</i> • Joseph Needham Ronan, <i>The Shorter Science and Civilisation in China: Volume 1</i> , ed. Colin A. Ronan (selections on Yen Shih the artificer)	iRAT_1 tRAT_1
4	<b>Robots in Myth and Early Science Fiction:</b> Terrifying Robots and Artificial Life	• Mary Shelley, <i>Frankenstein</i> (selections) • Karel Čapek, <i>R.U.R.</i> (selections) • Michael Szollosy, ‘Freud, Frankenstein, and Our Fear of Robots’	
	<b>Robots in Myth and Early Science Fiction:</b> Helpful Robots	• Isaac Asimov, <i>I, Robot</i> (selections) • Roger Clarke, ‘Asimov’s Laws of Robotics: Implications for Information Technology’	



5	<b>Early Inventions:</b> Automata in the ancient, medieval, and early modern world	<ul style="list-style-type: none"> <li>• Heron of Alexandria, <i>On Automaton-Making</i>, trans. Susan Murphy (selections)</li> <li>• Gunalan Nadarajan, ‘Islamic Automation: A reading of al-Jazari’s <i>The Book of Knowledge of Ingenious Mechanical Devices</i>’, in <i>MediaArtHistories</i>, ed. Oliver Grau</li> </ul>	iRAT_2 tRAT_2
	<b>Early Inventions:</b> Deception and natural magic	<ul style="list-style-type: none"> <li>• Edgar Allan Poe, ‘Maezel’s Chess-Player’</li> <li>• Noel Sharkey and Amanda Sharkey, ‘Artificial Intelligence and Natural Magic’</li> </ul>	
6	<b>Early Inventions:</b> Automation and Unemployment in the 1930s and 1960s	<ul style="list-style-type: none"> <li>• Gregory Woirol, <i>The Technological Unemployment and Structural Unemployment Debates</i> (selections)</li> <li>• Rick Wartzman, <i>The End of Loyalty: The Rise and Fall of Good Jobs in America</i> (selections)</li> </ul>	
	<b>Interlude:</b> Chatbot Workshop		Essay_1
7	<b>Machine Learning:</b> What are machine learning and deep learning?	<ul style="list-style-type: none"> <li>• Pedro Domingos, <i>The Master Algorithm</i> (selections)</li> </ul>	iRAT_3 tRAT_3
	<b>Machine Learning:</b> Natural Language Processing / Understanding	<ul style="list-style-type: none"> <li>• Joseph Weizenbaum, ‘ELIZA—A Computer Program For the Study of Natural Language Communication Between Man And Machine’</li> <li>• Lauren F. Klein, ‘The Image of Absence: Archival Silence, Data Visualization, and James Hemings’</li> </ul>	
8	<b>Machine Learning:</b> Computer Vision	<ul style="list-style-type: none"> <li>• Nuria Rodríguez-Ortega, ‘Image Processing and Computer Vision in the Field of Art History,’ in <i>Routledge Companion to Digital Humanities and Art History</i>, ed. Kathryn Brown</li> <li>• Joy Buolemwini and Timnit Gebru, ‘Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification’</li> </ul>	
	<b>Cultural Receptions:</b> Indigenous AI	<ul style="list-style-type: none"> <li>• Jason Edward Lewis, ed., <i>Indigenous Protocol and Artificial Intelligence Workshops Position Paper</i> (selections)</li> </ul>	iRAT_4 tRAT_4
9	<b>Cultural Receptions:</b> Hope for the singularity	<ul style="list-style-type: none"> <li>• Ray Kurzweil, <i>When Computers Exceed Human Intelligence: The Age of Spiritual Machines</i> (selections)</li> <li>• Susan B. Levin, ‘Antiquity’s Missive to Transhumanism’</li> </ul>	

	<b>Cultural Receptions:</b> Robotic children	<ul style="list-style-type: none"> <li>• Carlo Collodi, <i>The Adventures of Pinocchio</i> (selections)</li> <li>• Frederick Schodt, 'Interface Between Man and Robot', in <i>The Astro Boy Essays</i></li> <li>• Brian Aldiss, <i>Supertoys last all summer long</i> (selections)</li> </ul>	
<b>10</b>	<b>Interlude:</b> Chatbot Beta Testing		Chatbot_Beta
	<b>Becoming Human:</b> The Turing Test and other criteria of general intelligence	<ul style="list-style-type: none"> <li>• Alan Turing, 'Computing Machinery and Intelligence', in <i>The Essential Turing</i>, ed. Jack Copeland</li> </ul>	iRAT_5 tRAT_5
<b>11</b>	<b>Becoming Human:</b> Robot rights	<ul style="list-style-type: none"> <li>• Philip K. Dick, <i>Do androids dream of electric sheep?</i> (selections)</li> <li>• Belinda Bennett and Angela Daly, 'Recognising rights for robots: Can we? Will we? Should we?'</li> </ul>	
	<b>Becoming Human:</b> Digital resurrection and mind preservation	<ul style="list-style-type: none"> <li>• Massimo Pigliucci, 'Mind Uploading: A Philosophical Counter-Analysis', in <i>Intelligence Unbound</i>, eds. Russell Blackford &amp; Damien Broderick</li> <li>• 'Be Right Back', <i>Black Mirror</i></li> </ul>	
<b>12</b>	<b>Chatbot Showcase</b>		Chatbot_Final
	<b>Postlude:</b> Topic to be determined by the class		
<b>Exams</b>			Essay_2

## Schedule of Assessments

A breakdown of planned assignments for the course.

### Essays (25% + 30% = 55%)

In response to a selection of prompts distributed 4 weeks in advance of the due dates, you will write two essays of approximately 1,000 words drawing on the course materials. Your best essay will be worth 30%; the other will be worth 25%. **Essay\_1** is due in Week 6; **Essay\_2** is due two weeks after lectures end.

### Team Contract (0%)

When you first meet your teams, you will be required to draw up a 'team contract' that sets expectations for your collaboration. You will use this contract to inform your evaluation of your peers' contributions to your team at the end of the semester.

### Readiness Assurance Tests ([2% \* 5] + [1% \* 5] = 15%)

This course employs a teaching method called Team-Based Learning (TBL). One component of TBL is that students are required to complete readings ahead of class, so they are prepared for their in-class team activities. To ensure that students complete the readings ahead of time, each unit opens with a "Readiness Assurance Test," or RAT, a 5-question quiz based on the main points of the pre-reading. You will take each RAT twice: individually (iRATs), and in your team

(tRATs). Each iRAT (including iRAT\_0) is worth 2% of your course grade; the worst score of your six iRATs will be dropped. Each tRAT is worth 1% of your course grade. These tests are to encourage you to keep up with the readings, to build rapport with your teammates, and to prepare you for the formative in-class activities where we will discuss and apply what we have read for that session.

### **Chatbot group project (25%)**

You and your team will work together throughout the semester to produce an AI-powered chatbot using IBM's Watson Assistant. This project requires no coding experience and uses only free services. Your team will work to identify a potential service where a chatbot may be useful; define its intents, entities, and dialog trees; test a prototype (or 'beta') in Week 10; and present your design to the class in Week 12.

### **Peer Evaluation (5%)**

With reference to your TeamContract, you will anonymously evaluate your teammates' contributions to your team throughout the semester. There will be a formative peer evaluation halfway through the semester as well; failure to complete the formative peer evaluation or this final evaluation will result in penalties to your grades for team assignments. A portion of your grade on the peer evaluation will be based on your level engagement with the peer evaluation exercise. The instructor reserves the right to adjust peer evaluations in response to fairness or other considerations.

## LOWER DIVISION – FEMINIST PHILOSOPHY

Feminism is a political and activist movement aimed at ending sexism, misogyny, and injustices faced by women, gender minorities, and others adversely affected by patriarchy. Feminism is also a rich intellectual tradition dating back centuries, which uses various facets of women’s experience to challenge oppressive social and intellectual frameworks, imagine alternatives, and uncover insights in more abstract domains. Some ethical, epistemological, political, or metaphysical issues are distinctively, if not uniquely, raised in the feminist tradition. Feminist scholarship also considers the many different perspectives that intersect with those of women, including those of Black, indigenous, and other people of colour; people with disabilities; and queer and trans folks. This course surveys a number of important topics and writers in feminist philosophy, beginning with historical and timeless issues for feminists, such as how to theorize oppression, misogyny, reproductive rights, and women’s work. We then consider several theoretical approaches, such as Black feminism, intersectionality, and postcolonial feminism. The final sessions of the course consider recent ways in which feminist philosophy and feminist theory have critiqued the tech industry.

### Course Schedule

Week	Topic	Reading	Due Dates
1	Introduction: Feminism & Feminist Philosophy	Syllabus	
	Oppression	Marilyn Frye, “Oppression,” <i>The Politics of Reality</i> .	
2	Misogyny	Kate Manne, <i>Down Girl</i> , selections	Journal_1
	The Suffrage Movement	Glenda Norquay (ed.), <i>Voices and Votes</i> , selections	
3	Women’s Education	Anna Julia Cooper, <i>A Voice from the South</i> , “The Higher Education of Woman”	
	Reproductive Rights	Susan Sherwin, “Abortion Through a Feminist Ethics Lens”	
4	Women in the Workplace	Mary Johnstone-Louis, “Corporate Social Responsibility and Women’s Entrepreneurship: Towards a More Adequate Theory of ‘Work’”	
	Care Work	Eva Feder Kittay, <i>Love’s Labor</i> , selections	Journal_2
5	Sex Work	Julia O’Connell Davidson, “The Rights and Wrongs of Prostitution”	
	Pornography	Rae Langton, “Speech Acts and Unspeakable Acts”	
6	Intersectionality	Kimberlé Crenshaw, “Mapping the Margins: Intersectionality, Identity Politics and Violence against Women of Color”	
	Feminist Metaphysics	María Lugones, “Playfulness, ‘World’-Travelling, and Loving Perception”	Journal_3

7	Feminist Epistemology and Philosophy of Science	Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective"	
	Black Feminist Epistemology	Patricia Hill Collins, <i>Black Feminist Thought</i> , selections	
8	Feminist Anger	Myisha Cherry, <i>The Case for Rage</i> , selections	
	Allyship	Veronica Ivy, "Allies Behaving Badly: Gaslighting as Epistemic Injustice"	Midterm_Paper
9	Indigenous Matriarchy as Feminism	Jihan Gearon, "Indigenous Feminism is Our Culture"	
	Missing and Murdered Indigenous Women and Girls	Sherene Razack, "Gendering Disposability"	
10	Postcolonial Feminism	Elena Ruíz, "Postcolonial and Decolonial Feminisms"	
	Feminism and Disability	Alison Kafer, "Feminist Queer Crip"	Journal_4
11	Trans Feminism	Talia Mae Bettcher, "Evil Deceivers and Make-Believers: On Transphobic Violence and the Politics of Illusion"	
	Queer Feminism	Eve Kosofsky Sedgwick, "Queer and Now"	
12	Data Feminism	Catherine D'Ignazio and Lauren Klein, <i>Data Feminism</i> , selections	
	Technological Racism	Ruha Benjamin, <i>Race after Technology</i> , selections	Journal_5
Exams	Term_Paper		

## Schedule of Assessments

A breakdown of planned assignments for the course.

### Online Discussion (10%)

This course will use a gamified discussion platform (ideally YellowDig, but MS Teams can be hacked to make this work if need be). Students will earn points by contributing to the discussion platform; to receive full marks, students must earn enough points to reach a weekly quota. Contributions may include: questions about course material, questions about assignments, sharing additional sources or news articles, sharing relevant insights or personal experiences, or commenting on other students' posts.

### Reading Journal (5% \* 5 = 25%)

Every two weeks (except Week 8), students will submit a short reflection piece on the most recent set of readings. These short, informal essays will be about 300 words long.

**Midterm Paper (25%)**

A formal philosophical essay, about 800 words. Due Week 8.

**Term Paper (40%)**

A formal philosophical essay, about 1,500 words. Due two weeks after classes end.

## UPPER DIVISION – SOCIAL EPISTEMOLOGY

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Classically, in the Western tradition, epistemology has been dominated by questions about the nature of knowledge, skepticism, scientific objectivity, and justification. While important, these questions tend to be discussed in the abstract, paying little attention to the actual contexts in which people go about acquiring, testing, and sharing their beliefs, knowledge, and understanding. In other words, the classical project in the theory of knowledge has tended to overlook the experiences of actual *knowers*.

In recent decades, this approach to epistemology has been challenged from several angles. Postmodernists raise suspicions about supposedly apolitical knowledge claims. Feminists and other liberatory theorists ask about the epistemological significance of the knower's social identity. In a tradition stemming from Aristotle's ethics, virtue and vice theorists investigate the traits of the knower that are most and least conducive to epistemic goods. Work in social ontology raises questions about whether groups can have beliefs and knowledge. Social psychology exposes the presence of bias in our epistemic practices. The possibility of epistemic harms and distinctively epistemic injustices arise especially where marginalized and dominant social groups interact. The role of trust in acquiring beliefs exposes our limitations and vulnerabilities as inquirers. Ignorance and prejudice can masquerade as knowledge in socially unjust conditions. Finally, there has been some work applying epistemological tools to understand real world phenomena, such as conspiracy theories and fake news. This course surveys each of these topics.

### Course Schedule

Week	Topic	Reading	Due Dates
1	Introduction	Syllabus	
	Power and Postmodernism	Michel Foucault, <i>The History of Sexuality, Vol. 1</i> , pp. 92–131.	
2	Feminist Epistemology	Elizabeth Anderson, "Feminist Epistemology: An Interpretation and a Defense"	
	Feminist Philosophy of Science	Helen Longino, "Values and Objectivity," in <i>Science as Social Knowledge</i>	
3	Virtue Reliabilism	Ernest Sosa, "The Raft and the Pyramid"	
	Virtue Reliabilism	John Greco, "Agent Reliabilism"	
4	Virtue Responsibilism	Linda Zagzebski, <i>Virtues of the Mind</i> , sections 2.7 and 4.1	
	Virtue Responsibilism	James Montmarquet, "Epistemic Virtue and Doxastic Responsibility"	
5	Epistemic Vices	Heather Battaly, "Varieties of Epistemic Vice," in <i>The Ethics of Belief</i> , eds. J. Matheson and R. Vitz.	
	Epistemic Vices	Quassim Cassam, "Vice Epistemology"	
6	Group Beliefs and Knowledge	Margaret Gilbert, "Collective Epistemology"	Midterm Paper

	Group Beliefs and Knowledge	Raimo Tuomela, "Group Knowledge Analyzed"	
7	Social Psychology and Philosophy of Implicit Bias	Alex Madva, "Virtue, Social Knowledge, and Implicit Bias," in <i>Implicit Bias and Philosophy, Vol. 1</i> , eds. M. Brownstein and J. Saul	
	Social Psychology and Philosophy of Implicit Bias	Jules Holroyd and Joseph Sweetman, "The Heterogeneity of Implicit Bias," in <i>Implicit Bias and Philosophy, Vol. 1</i>	
8	Epistemic Injustice	Miranda Fricker, "Testimonial Injustice," in <i>Epistemic Injustice: Power and the Ethics of Knowing</i>	
	Epistemic Injustice	Emmalon Davis, "On Epistemic Appropriation"	
9	Trust	Paul Faulkner, "Norms of Trust," in <i>Social Epistemology</i> , eds. A. Haddock, A. Millar, and D. Pritchard	
	Trust	Judith Baker, "Trust and Rationality"	
10	Ignorance	Charles Mills, "White Ignorance," in <i>Race and Epistemologies of Ignorance</i> , eds. S. Sullivan and N. Tuana	
	Ignorance	José Medina, "Active Ignorance, Epistemic Others, and Epistemic Friction," in <i>The Epistemology of Resistance</i>	
11	Conspiracy Theories	Charles Pigden, "Conspiracy Theories and Conventional Wisdom"	
	Conspiracy Theories	Susan Feldman, "Counterfactual Conspiracy Theories"	
12	Fake News	Regina Rini, "Fake News and Partisan Epistemology"	
	Poster Session		Poster
Exams			Term Paper

### Schedule of Assessments

A breakdown of planned assignments for the course.

#### **Midterm Paper (30%)**

An essay of approximately 2,000 words. Prompts will be supplied, but students may write on another topic with the instructor's approval.



**Poster Project (25%)**

Individually or in groups of 3–4 (depends on enrolment), produce a research poster on a topic drawing from the course readings. Posters will be showcased in the final class session. Each student must evaluate two other posters; these peer evaluations will be combined with the instructor’s evaluations to produce the grade.

**Term Paper (45%)**

An essay of approximately 3,000 words on a topic drawing from the course material. Prompts will be supplied, but students are encouraged to propose a topic to the instructor.

## UPPER DIVISION – PRIVACY: FUNDAMENTAL RIGHT OR OUTMODED IDEAL?

In the mid-twentieth century, the right to privacy had been enshrined by the United Nations as one of the fundamental human rights, and was recognized as a key component of democracy. But, as one of the original architects of the Internet, Vint Cerf, observed in 2013, from a historical perspective ‘privacy may actually be an anomaly’. Indeed, privacy rights do not appear in any of the philosophical or political texts of the Enlightenment, which are credited with expounding the very idea of human rights for the first time. It is not until the late nineteenth century, when new technologies – photography and cheap printing – enabled new forms of intrusion on private life, that legal scholars and philosophers began to discuss the possibility of a ‘right to be let alone’. A century and a half later, new developments in computing and information technology are poised to return us to a pre-privacy world, but on a global scale.

In this course, we will explore historical and contemporary writings on privacy. We will trace the evolution of thinking about privacy from the pre-modern era to the information revolution. We will discuss philosophical accounts of what privacy is, and why it has value. Of interest to us will be the historical question of whether privacy is a recent invention, or a reconceptualization of older ideas. A recurring theme will be how changes in technology have prompted changes in how we think about privacy, whether we think it is worth protecting, and whether it was merely an historical anomaly.

### Course Schedule

Week	Topic	Reading	Due Dates
1	Introduction	Syllabus	
	Early history: confessionals and barriers	Irven Resnick, ‘Learning from the Confessional in the Later Thirteenth Century: Contributions to Human Sexuality, Daily Life, and a Science of Nature’	
2	The Panopticon	<ul style="list-style-type: none"> <li>• Jeremy Bentham, <i>The Works of Jeremy Bentham, Published under the Superintendence of his Executor, John Bowring</i> (selections)</li> <li>• Michel Foucault, <i>Discipline and Punish</i> (selections)</li> </ul>	
	Photography and the Right to Be Let Alone	Samuel Warren & Louis Brandeis, ‘The Right to Privacy’	
3	Privacy as Information Control	Alan Westin, <i>Privacy and Freedom</i> (selections)	
	Privacy as Information Control	William Parent, ‘Privacy, Morality, and the Law’	
4	Privacy as Access Control	Ruth Gavison, ‘Privacy and the Limits of the Law’	
	Privacy as Contextual Integrity	Helen Nissenbaum, ‘Privacy as Contextual Integrity’	
5	Privacy as Power	Carissa Véliz, <i>Privacy is Power</i> (selections)	

	Privacy, Dignity, and Autonomy	Edward Bloustein, 'Privacy as an Aspect of Human Dignity'	
6	Privacy and Intimacy	Charles Fried, 'Privacy', in <i>An Anatomy of Values</i>	
	The Right to Forget	Anita Allen, 'The Electronic Data Give-Away'	MidtermPaper
7	Privacy and Democracy	Jeffrey Reiman, 'Driving to the Panopticon'	
	Electronic Databanks	Simson Garfinkel, <i>Database Nation</i> (selections)	
8	Privacy and <i>Roe v. Wade</i>	Jean Cohen, 'Redescribing Privacy: Identity, Difference, and the Abortion Controversy'	
	Feminist Critiques of Privacy	Catharine MacKinnon, <i>Toward a Feminist Theory of the State</i> (selections)	
9	Feminist Defences of Privacy	Anita Allen, <i>Uneasy Access: Privacy for Women in a Free Society</i> (selections)	
	Government Surveillance	Kenneth Einar Himma, 'Why Security Trumps Privacy', in <i>Privacy, Security and Accountability: Ethics, Law and Policy</i> , ed. Adam Moore	
10	Surveillance Capitalism	Shoshana Zuboff, <i>The Age of Surveillance Capitalism</i> (selections)	
	Terms of Service	Irene Pollach, 'A Typology of Communicative Strategies in Online Privacy Policies: Ethics, Power, and Informed Consent'	
11	Social Media	Zhen Troy Chen and Ming Cheung, 'Privacy perception and protection on Chinese social media: a case study of WeChat'	
	Electronic Health Records	<ul style="list-style-type: none"> <li>• Mark Rothstein, 'Is Deidentification Sufficient to Protect Health Privacy in Research?'</li> <li>• Sharona Hoffman, 'Electronic Health Records and Research: Privacy Versus Scientific Priorities'</li> </ul>	
12	Discussion: Is Privacy Dead?	Review previous readings and your own research	
	Group Projects	No reading	GroupProject
Exams			TermPaper

## Schedule of Assessments

A breakdown of planned assignments for the course.

### **Group Project (30%)**

In a group of three or four, produce a case study of a privacy violation. It could be a data breach, case of identity theft, surveillance, snooping, etc. Your presentation must use the theoretical material we studied to analyze technological and normative features of the case, and offer some critical commentary. A component of the grade on this assignment will be associated with a peer evaluation exercise.

### **Midterm Paper (30%)**

A philosophical essay of about 1,500 words on the nature of privacy. May be theoretical or applied. Prompts will be supplied, but students may propose their own topics of interest.

### **Term Paper (40%)**

A philosophical essay of about 2,000 words that substantially engages with the course material. May be theoretical or applied. Prompts will be supplied, but students may propose their own topics of interest.

## UPPER DIVISION – PHILOSOPHY OF AND THROUGH TABLETOP ROLEPLAYING GAMES

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Roleplay has been an important pastime for centuries, but the last century saw a formalization of the hobby following the publication of *Dungeons & Dragons* and various other tabletop roleplaying games. The cultural impact of these games has been enormous, shaping the development of video games and speculative fiction more generally. These games also raise a number of philosophical questions, including: Could a magical creature that is inherently evil be responsible for its heinous actions? How are the representations of fantasy peoples connected to racism and colonialism in the real world? Are games political? If so, how can designers use games as vehicles for their real-world causes? What is a game, anyway? Is playing games good or bad for us? In this course, we'll examine these questions through a combination of philosophical readings and roleplaying games. Students will reflect on their learning through both traditional philosophical writing and by designing their own games.

### Course Schedule

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The course is broken into five units, as described below. The units are of varying length, and each involves some combination of philosophical reading, philosophical writing, game reading, game playing, and game writing.

#### **1. Introduction to the Course (Week 1)**

The first class will introduce the concept of a tabletop roleplaying game to students who are unfamiliar. We will also discuss the unusual format of this course, which mixes traditional philosophical reading and writing with active learning through participation in roleplaying games.

Game: • Alex Roberts, *For the Queen*, a card-based collaborative storytelling game.

Reading: • The Course Guidebook, which provides some additional information about what to expect from this unusual course as well as assignment descriptions and rubrics.

#### **2. Ethical Decisions in Fantasy Fiction: Dungeons & Dragons (Weeks 2–4)**

If you know anything about roleplaying games, it's *Dungeons & Dragons*, the name of the most popular and arguably the first tabletop roleplaying game. Eleven official editions have been published between the game's initial release in 1974 and the most recent "fifth" edition in 2014. One aspect that has been consistently present in the rules and the worldbuilding of *D&D* is the existence of good and evil, law and chaos, as fundamental forces and metaphysical fact above and beyond individual or cultural moral worldviews. Following science fiction, fantasy, and colonial fiction tropes that were popular in the 1960s and '70s, many intelligent creatures are depicted as inherently beneficent or cruel, orderly or anarchic. These portrayals raise questions about both the nature of free will in a universe where our practical orientations are determined by forces greater than ourselves, and about the racist and sexist tropes that underlie these depictions. We will examine these questions carefully so as not to subject anyone to potentially offensive material in a particularly visceral way.

Game: • Mike Mearls, Jeremy Crawford, Chris Perkins, Rodney Thompson, Peter Lee, James Wyatt, Robert J. Schwalb, Bruce R. Cordell, Chris Sims, and Steve Townshend, *Dungeons & Dragons*, the 5th edition of the classic fantasy roleplaying game. We'll also examine some passages from older editions.  
• In addition, we will introduce the X-card safety mechanic developed by John Stavropoulos.

Readings: • Greg Littmann, "Sympathy for the Devils: Free Will and *Dungeons & Dragons*," in *Dungeons and Dragons and Philosophy: Read and Gain Advantage on All Wisdom Checks*, ed. Christopher Robichaud.  
• Charles Mills, "The Wretched of Middle-Earth: An Orkish Manifesto," *The Southern Journal of Philosophy*.

### **3. The Gig Economy, Poverty, and Monsters: #iHunt (Weeks 5–7)**

Here's a claim: all games are political. In this unit, we'll explore that claim through *#iHunt*, a roleplaying game that offers a particular experience of poverty in the early 21st century. The game is set in an urban fantasy setting similar to some popular horror-mystery series, but shifts the focus to the struggles of the urban poor in a world where there are dangerous monsters that need to be slain, but only the most desperate in society are willing to do the job. This will inform our discussion of the moral and political philosophy of poverty, and reflections on the politics of gaming.

Game: • Olivia Hill and Filamena Young, *#iHunt*, a game about monster hunting as cash-strapped gig workers in an urban fantasy setting.

Reading: • Corinna Mieth and Garrath Williams, "Poverty, Dignity, and the Kingdom of Ends," in *Human Dignity and the Kingdom of Ends: Kantian Perspectives and Practical Applications*, eds. Jan-Willem van der Rijt and Adam Cureton.

### **4. But What Is A Game? Journaling, Lyric, and Solo Games (Weeks 8–9)**

Some roleplaying games may seem at first to stretch our concept of a "game," particularly those that remove elements that feel "gamey" (such as dice or points), or those that emphasize story or emotional experiences over mechanical abstractions, or those that are meant to be played solo instead of in a group. In this unit, we'll play some of these games and read a philosophical account of games to try to make sense of what, exactly, we've been playing. We'll also question how games might be good or bad for us.

Games: • Anna Anthropy, *Princess With A Cursed Sword*, a story-writing game about a princess trying to find the origins of a sword she cannot put down.  
• Chris Bissette, *The Wretched*, a journaling game about trying to survive on a crumbling space station as a hostile creature hunts you.  
• Sascha Moros, *Where Magic Died*, a lyric game where you play a ruined tower, one of the last remnants of a magical past in a post-fantasy world, and describe what visitors to the tower find there.  
• Avery Alder, *The Quiet Year*, a map-drawing game where you play as a community

rebuilding after the collapse of civilization against a backdrop of dwindling time and rising concern.

- Readings:
- C. Thi Nguyen, “Agency as Art,” in *Games: Agency as Art*.
  - Michael Ridge, “Games and the Good Life,” *Journal of Ethics & Social Philosophy*.

## **5. What’s So Cool About Philosophy? Doing Philosophy Through Game Design (Weeks 10–12)**

We’ve seen how roleplaying games can do more than just simulate conflict and tell heroic stories. They can also dramatize political messages and provoke emotional experiences. Can games do philosophical work too? In this last unit, you’ll design, playtest, and publish your own games, with the goal of exploring some philosophical topic of interest to you.

- Games:
- Jared Sinclair, *What’s So Cool About Outer Space?*, a simple game about science fiction adventure.
  - Take a look through the many games based on the “What’s So Cool About” framework that have been published on itch.io.

- Reading:
- Trystan Goetze, “Philosophy and Tabletop Roleplaying Games,” self-published essay on itch.io, as part of a game design essay jam.

### **Assessment**

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Coursework will be assessed based on engagement with both the philosophical material and the games we will play in and out of class.

### **Participation (10%)**

You are expected to participate in the games we play in class, and in the solo games you’ll be assigned to play outside of class.

### **Two Essays (25% + 25%)**

After Unit 2 and Unit 3, you will write a short essay (about 1,500 words) reflecting on a philosophical question raised in connection with that unit’s game.

### **Game Portfolio (15%)**

Throughout the semester, you will produce a variety of materials associated with the games we’ll be playing. These include: character sheets, character backstories, session logs, audio recordings, map drawings, and so on. At the end of the semester, you will hand in this portfolio along with a short (about 1,000 words) reflection on your experiences that connects the games we played to some philosophical insights. These materials will be returned to you if you want them.

### **Game Design (25%)**

The final unit will be partly dedicated to practising the craft of game design. At the end of the semester, you’ll provide a link to where you’ve published your game. It must “do philosophy” somehow. You will also write a short (about 500 words) “artist’s statement” describing the choices you made and your playtesting experience.

## UPPER DIVISION / GRADUATE SEMINAR – EPISTEMIC INJUSTICE

Have you ever been doubted not because of what you said, but because of who you are? Have you ever had a difficult time explaining something that is important to you, but for which your conversation partners have lacked the required background to understand what you were saying? Have you been frustrated by the ignorance some people have of basic facts about your culture? Have you noticed that some communities lack access to important epistemic resources, such as reliable news media, public libraries, or educational opportunities?

‘Epistemic injustice’ refers to instances or patterns that unfairly discount, ignore, reject, distort, or impair the subject’s ability to acquire or contribute to knowledge and understanding. Experiences of epistemic injustice, particularly having one’s testimony or one’s understanding of one’s own experience ignored or rejected, have been noted by writers from marginalized social groups for many years, but it is only recently that philosophical attention has been turned to the issue. The last decade has seen a proliferation of research analysing, applying, and extending accounts of various kinds of epistemic injustice, and proposing ways to confront these and other epistemic wrongs. This seminar canvasses the central texts and live areas of debate in this field, including: silencing and smothering testimony, testimonial injustice, virtuous listening, hermeneutical injustice, active ignorance, distributive epistemic injustice, epistemic oppression, epistemic justice and democracy, and applications of epistemic injustice to specific settings and cases.

### Course Schedule

Week	Topic	Reading	Due Dates
1	Introduction	<ul style="list-style-type: none"> <li>• Syllabus</li> <li>• Tyler Ford, ‘My life without gender’, <i>The Guardian</i>, 7 Aug 2015, <a href="https://www.theguardian.com/world/2015/aug/07/my-life-without-gender-strangers-are-desperate-to-know-what-genitalia-i-have">https://www.theguardian.com/world/2015/aug/07/my-life-without-gender-strangers-are-desperate-to-know-what-genitalia-i-have</a></li> <li>• Reni Eddo-Lodge, ‘Why I’m no longer talking to white people about race’, 22 Feb 2014, <a href="http://renieddolodge.co.uk/?p=842">http://renieddolodge.co.uk/?p=842</a></li> <li>• Gretchen Kelly, ‘The thing all women do that you don’t know about’, <i>Huffpost</i>, 23 Nov 2015, <a href="https://www.huffingtonpost.com/gretchen-kelly/the-thing-all-women-do-you-dont-know-about_b_8630416.html">https://www.huffingtonpost.com/gretchen-kelly/the-thing-all-women-do-you-dont-know-about_b_8630416.html</a></li> </ul>	
2	Epistemic Wrongs	<ul style="list-style-type: none"> <li>• Audre Lorde, ‘The Uses of Anger’.</li> <li>• Patricia Hill Collins, ‘Black Feminist Epistemology’, in <i>Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment</i></li> <li>• Kristie Dotson, ‘Tracking Epistemic Violence, Tracking Practices of Silencing’</li> </ul>	
3	Testimonial Injustice	<ul style="list-style-type: none"> <li>• Miranda Fricker, <i>Epistemic Injustice: Power and the Ethics of Knowing</i>, ch. 1–3</li> </ul>	
4	Testimonial Injustice	<ul style="list-style-type: none"> <li>• Miranda Fricker, <i>Epistemic Injustice</i>, ch. 4–6</li> </ul>	
5	Testimonial Injustice	<ul style="list-style-type: none"> <li>• Paul Faulkner, ‘A Virtue Theory of Testimony’</li> </ul>	



		<ul style="list-style-type: none"> <li>• Jeremy Wanderer, ‘Addressing Testimonial Injustice: Being Ignored and Being Rejected’</li> <li>• Emmalon Davis, ‘Typecasts, Tokens, and Spokespersons: A Case for Credibility Excess as Testimonial Injustice’</li> </ul>	
6	Hermeneutical Injustice	<ul style="list-style-type: none"> <li>• Miranda Fricker, <i>Epistemic Injustice</i>, ch. 7</li> <li>• José Medina, ‘Imposed Silences and Shared Hermeneutical Responsibilities’, in <i>The Epistemology of Resistance</i></li> <li>• Miranda Fricker, ‘Epistemic injustice and the preservation of ignorance’, in <i>The epistemic dimensions of ignorance</i>, eds. Rik Peels and Martijn Blaauw</li> </ul>	
7	Active Ignorance	<ul style="list-style-type: none"> <li>• Gaile Pohlhaus, Jr., ‘Relational Knowing and Epistemic Injustice: Toward a Theory of Willful Hermeneutical Ignorance’</li> <li>• José Medina, ‘Resistance as Epistemic Vice and as Epistemic Virtue’, in <i>The Epistemology of Resistance</i></li> <li>• Charles Mills, ‘White Ignorance’, in <i>Race and Epistemologies of Ignorance</i>, eds. S. Sullivan and N. Tuana.</li> </ul>	
8	Epistemic Justice and Democracy	<ul style="list-style-type: none"> <li>• Amandine Catala, ‘Democracy, Trust, and Epistemic Justice’</li> <li>• Susan Dieleman, ‘Epistemic Justice and Democratic Legitimacy’</li> <li>• Miranda Fricker, ‘Epistemic Justice as a Condition of Political Freedom?’</li> </ul>	
9	Epistemic Oppression	<ul style="list-style-type: none"> <li>• Kristie Dotson, ‘Conceptualizing Epistemic Oppression’</li> <li>• Nora Berenstain, ‘Epistemic Exploitation’</li> <li>• Alison Bailey, ‘On Anger, Silence, and Epistemic Injustice’, in <i>Harms and Wrongs in Epistemic Practice</i>, eds. Simon Barker, Charlie Crerar, and Trystan Goetze</li> </ul>	
10	Epistemic Injustice Applied	<ul style="list-style-type: none"> <li>• Katharine Jenkins, ‘Rape Myths and Domestic Abuse Myths as Hermeneutical Injustices’</li> <li>• Ian James Kidd and Havi Carel, ‘Epistemic Injustice and Illness’</li> <li>• Ben Kotzee, ‘Education and Epistemic Injustice’, in <i>Routledge Handbook of Epistemic Injustice</i>, eds. I. J. Kidd, J. Medina, G. Pohlhaus</li> </ul>	
11	Structural Barriers to Epistemic Justice	<ul style="list-style-type: none"> <li>• Benjamin Sherman, ‘There’s No (Testimonial) Justice: Why Pursuit of a Virtue is Not the Solution to Epistemic Injustice’</li> <li>• Elizabeth Anderson, ‘Epistemic Injustice as a Virtue of Social Institutions’</li> <li>• Veronica Ivy, ‘Allies Behaving Badly: Gaslighting as Epistemic Injustice’, in <i>Routledge Handbook of Epistemic Injustice</i></li> </ul>	

<b>12</b>	Epistemic Injustice Grab Bag	<ul style="list-style-type: none"> <li>• David Coady, ‘Two Concepts of Epistemic Injustice’</li> <li>• Faik Kurtulmus and Gürol Irzik, ‘Justice in the Distribution of Knowledge’</li> <li>• Heidi Grasswick, ‘Understanding Epistemic Trust Injustices and Their Harms’, in <i>Harms and Wrongs in Epistemic Practice</i></li> </ul>	
<b>Exams</b>			Term Paper

## Schedule of Assessments

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Assigned work for this course.

### **Weekly Discussion Questions (10%)**

Post three to five questions about the assigned reading before each class to help structure our discussion.

### **Weekly Reading Journal (15%)**

After class, write about 300 words in response to the reading and post it online. You may earn up to 5 bonus points towards your course grade by writing a substantive reply to another student’s post.

### **Seminar Presentation (25%)**

Lead part of one session of the seminar with a 30 minute presentation, then moderate the following 30 minutes of discussion. The presentation must summarize the main points of one of the assigned readings, raise some critical points for discussion, and connect the reading to either another philosophical article you have found in your independent research or to a detailed case study from real life or fiction. Sign up for a seminar slot by the end of Week 2.

### **Research Paper (50%)**

Write an essay of 5,000 words (7,000 words for graduate students). It must make reference to and substantively engage with some of the mandatory readings. You are asked to send me a paper proposal, comprising an outline and provisional list of references, no later than Week 12, which we will discuss in a one-on-one tutorial. Due two weeks after lectures end.

**Sample Lesson Plan:  
Embedded EthiCS Module, CS 290 Ph.D. Grad Cohort Seminar**

The below is also available in the Embedded EthiCS @ Harvard module repository:  
<https://embeddedethics.seas.harvard.edu/cs-290-2022-spring>

An enhanced version I wrote, with notes on how instructors can adapt repository entries for their own contexts, is available here:  
<https://embeddedethics.seas.harvard.edu/using-module-repository-entry>

**Overview**

**Course:** CS 290 PhD Grad Cohort Seminar

**Course Level:** Graduate (PhD)

**Course Description:** “CS290 is a discussion-based seminar designed for entering Computer Science Ph.D. students. The goals of the course are three-fold:

- to introduce students to research around the CS area,
- skills building, and
- cohort building.

We will lead sessions on skill building (e.g. paper reading, presentation), soft skill building (e.g. managing advising relationships, supporting your peers), and academic culture (e.g. mental health in academia, power dynamics in scientific communities), as well as research and professional oriented discussions with a broad mixture of CS faculty members. We will also “visit” and discuss one or two CS colloquia.

This is a full-year, 4-unit course, meeting once a week in each of the fall and the spring. Students must complete both terms of this course (parts A and B) within the same academic year to receive credit.

Please come prepared having done the readings / assignment listed on the schedule prior to class.”

Course website for S22: <https://yanivyacoby.github.io/harvard-cs290/schedule/>  
Course on Canvas: <https://canvas.harvard.edu/courses/101943>

**Module Topic:** Value-Sensitive Design

**Module Author:** Trystan S. Goetze

**Semesters Taught:** Spring 2022

**Tags:** value-sensitive design [CS], stakeholder analysis [phil], nudging [both], social media [CS], ethical values [phil]

**Module Overview:** This module introduces graduate students to the paradigm of value-sensitive design through an in-depth exercise taken from Friedman and Hendry’s book, *Value Sensitive Design*. After a brief introduction to the importance of computer ethics and the responsibility of computing professionals,

We wanted to reuse some material from a previous module to aid in the development of this lesson. The CS instructors were particularly interested in the module on nudging by Meica

	<p>value-sensitive design is introduced, followed by a small group exercise based on a case of social media design. Students complete a value-sensitive design worksheet and make recommendations to the developers. The module then moves to a large group discussion.</p>	<p>Magnani for CS 236R in Fall 2020: <a href="https://embeddedethics.seas.harvard.edu/cs-236r-2020-fall">https://embeddedethics.seas.harvard.edu/cs-236r-2020-fall</a></p> <p>I modified the module to spend the majority of class time on the activity and discussion, with very little time spent delivering content. Students were given a pre-reading to ensure they were familiar with the main concepts.</p> <p>There was limited material available in the module archive, so I had to reverse engineer and rebuild the actual activity. I used the value scenario analysis method described in the Nathan et al. reading as a guide to designing a worksheet that students completed on Google Slide decks shared in their small groups.</p>
<p><b>Connection to Course Material:</b></p>	<p>The module provides students with hands-on practice using a value-sensitive design method, thereby introducing them to the notion that design processes should incorporate reflection on social and ethical issues from various perspectives. This will be an important professional skill as they go on in their research careers and beyond.</p>	<p>CS 290 is unlike other courses in that it has no core technical content, and is intended as a professional development seminar. For this reason, we felt it would be best to introduce the students to an exercise and a way of thinking that can be adapted to a wide variety of CS research and development projects.</p>

<p><b>Goals</b></p>		
	<p><b>Module Goals:</b></p> <ol style="list-style-type: none"> <li>1. Students will be familiar with some of the motivation for incorporating ethical reflection into their professional practice as researchers or developers in the tech industry.</li> <li>2. Students will be familiar with value-sensitive design and some of its motivations.</li> <li>3. Students will gain hands-on experience engaging with a value-sensitive design method, specifically, value scenario analysis.</li> </ol>	<p>The primary goal of the module is to introduce students to value-sensitive design and practice applying the paradigm’s ideas through a structured exercise.</p>
<p><b>Key Philosophical Questions:</b></p>	<ol style="list-style-type: none"> <li>1. Whose responsibility is it to consider the ethical and social implications of computing and information technology?</li> <li>2. How can ethical considerations be integrated into different steps of the design process?</li> </ol>	<p>The first two philosophical questions are primary. In this module we’re interested in getting CS PhD students in thinking differently about tech</p>

<p>3. Does nudging raise ethical concerns?</p>	<p>development. The focus is on their professional responsibilities and how to fulfill them.</p> <p>The question about nudging is secondary, and is addressed by engaging in the case study, instead of through direct instruction.</p>
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Materials	
<p><b>Key Philosophical Concepts:</b></p> <ul style="list-style-type: none"> <li>● Value-sensitive design</li> <li>● Stakeholders</li> <li>● Nudging</li> </ul>	<p>The module instructor does little direct instruction, relying on the academic maturity of the students to do the pre-reading to familiarize themselves with the main concepts. Value-sensitive design is briefly described by the instructor to provide some context for the module and to suggest how it can be used more broadly to incorporate ethical reflection into research and development.</p>
<p><b>Assigned Readings:</b></p> <ul style="list-style-type: none"> <li>● Nathan et al., ‘Envisioning systemic effects on persons and society throughout interactive system design’, <a href="https://dl.acm.org/doi/10.1145/1394445.1394446">https://dl.acm.org/doi/10.1145/1394445.1394446</a></li> <li>● Fusaro &amp; Sperling-Magro, ‘Much anew about “nudging”’, <a href="https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/much-anew-about-nudging">https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/much-anew-about-nudging</a></li> </ul>	<p>Nathan et al. introduces some of the motivation for value-sensitive design, and the specific method used in this module: value scenario analysis. It also includes some guidance and examples. Students were asked to pay particular attention to §§5–7, where the method is discussed.</p> <p>Fusaro &amp; Sperling-Magro is an interview with Thaler and Sunstein, who popularized the concept of nudging in design. This reading is secondary, intended to provide some background on the concept of nudging and its applications, so that the module doesn’t need any time spent on direct instruction on this concept. Students were asked to pay particular attention to this video clip, which describes what a nudge is:  <a href="https://www.mckinsey.com/Videos/video?vid=6265333924001&amp;plyrid=HkOJqCPWdb&amp;aid=ED969673-0183-4C11-8EAC-E2C8DD7AA1B5">https://www.mckinsey.com/Videos/video?vid=6265333924001&amp;plyrid=HkOJqCPWdb&amp;aid=ED969673-0183-4C11-8EAC-E2C8DD7AA1B5</a></p>

## Implementation

<b>Class Agenda:</b>	1. Introduction: <ul style="list-style-type: none"><li>a. What is Embedded EthiCS?</li><li>b. Agenda for today</li><li>c. Whose responsibility is it to do computer ethics?</li><li>d. What is value-sensitive design?</li></ul>	Introduction takes 15 minutes
	2. Small Group Activity: Value scenario analysis of a social media nudge	Small group activity takes 20 minutes
	3. Large Group Discussion of the activity	Large group discussion takes 35 minutes
	4. Wrap-up and homework assignment	Wrap-up takes 5 minutes

<b>Sample Class Activity:</b>	Students are presented with a case study on social media design. The basic idea is that they are working in a team to produce a social media platform that is designed to nudge users away from making toxic posts. After reading the case study, students complete a value scenario analysis worksheet in small groups. The worksheet has them consider direct and indirect stakeholders, their values, and impacts on them, both short and long term as well as how those impacts change as the technology becomes more pervasive. Finally, they are asked to make some recommendations about the design. The module then moves to a large group discussion, filling in the worksheet with their answers and discussing their recommendations.	This exercise creates a structure for engaging in value scenario analysis. The case study was chosen because these kinds of design interventions are actually being implemented on social media, and similar design choices crop up across different specializations in CS. The latter element helps the case be engaging to the diverse range of specialists taking this seminar.
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<b>Module Assignment:</b>	There was a pre-reading quiz, with three short questions: one on nudging, two on value-sensitive design.  After class, students were asked to complete the following short reflection assignment:  Write a paragraph (4–6 sentences) reflecting on your experience today engaging with value-sensitive design. Consider the following questions as a starting point: Did the activities prompt you to think about ethical issues in computer science that you hadn't considered before? If yes, what were they? How did the activity help? If no, why do you think the activity didn't help? How could the activity be changed to better suit the kinds of projects you're interested in (if it can't, say why)?	The pre-reading quiz is mainly to motivate students to complete the pre-reading, as it provides much of the background material needed to engage in the exercise. This kind of pre-session work is typical of CS 290.  The reflection assignment is unusual for CS 290 but is very brief.
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<b>Lessons Learned:</b>	Students were highly engaged, both in the small group activity and the large group discussion. Students kept the discussion going well past what I had initially planned, meaning that a second activity that I had envisioned was unnecessary.	The second activity was planned as a way to help students move from the case study we considered to applying value-sensitive design to projects of interest to them. In
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1. PhD students in CS are able to carry the discussion themselves. We don't need much prompting to come up with ethical and social implications of technology.
2. PhD students can be counted on to do the reading, unlike undergraduates.
3. The hands-on activity was a good use of class time, better than lecturing about the topics would have been.
4. Students engaged in a bit of back-and-forth discussion with one another in the large group discussion, which happened organically as they explored different ethical implications of the design choices discussed.
5. In the teaching lab, there was a concern that the activity wouldn't take the whole class time, hence I prepared a second activity that iterated on the first. The second activity wasn't necessary because there was enough to discuss just on the first scenario.

order to cut down on after class work and to keep the discussion more focused and less rushed, I chose to drop the second activity.

The slides below were used in a very brief lecture (10 minutes) introducing the topic.



# Value-Sensitive Design

CS 290 PhD Grad Cohort Research Seminar – Spring 2022  
Trystan S. Goetze, Ph.D. (he/they/she)

Embedded EthiCS™ @ Harvard

## About me

Dr. Trystan Goetze [ 📧: TRISS-tin GETS ]

Philosophy Postdoctoral Fellow of Embedded EthiCS

My research:

- Responsibility
- Epistemic injustice
- Ethics of AI and the tech industry

Links:

- Research: <https://philpeople.org/profiles/trystan-goetze>
- GitHub: <https://github.com/errantcanadian>
- Games: <https://errantcanadian.itch.io/>
- LinkedIn: <https://www.linkedin.com/in/trystangoetze/>
- Twitter: <https://twitter.com/errantcanadian>
- Web: <https://www.trystangoetze.ca/>



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## About Embedded EthiCS

Harvard's computer ethics programme.

Philosophy grad students and postdocs work with CS instructors to develop ethics lessons that are integrated into CS courses.

These modules link the technical material of your coursework with an ethical issue raised by the technology.

Started in 2017, now running a dozen modules a semester, from CS 1 to CS 290.

Expanding to other CS programmes worldwide.

### Goals of Course Modules

The Embedded EthiCS course modules teach students to...



Identify ethical and social issues



Reason through ethical and social issues



Communicate their reasoned position



Design ethically and socially responsible systems

<https://embeddedethics.seas.harvard.edu/>

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## Plan for today

1. Computer ethics and the computing professions
2. Value-sensitive design
3. Applying value-sensitive design to a case study: Nudging
4. Applying value-sensitive design to your own projects
5. Homework: [bit.ly/cs290homework](https://bit.ly/cs290homework)

### Readings

- Nathan et al. (2008): Outlines the value sensitive design method we'll be applying (especially §§5–7)
- Fusaro and Sperling Magro: An interview with Cass Sunstein and Richard Thaler on the concept of “nudging”

### Groups

- We'll be working in small groups today
- Make sure you're seated in a group of 3–5
- Make sure you have a group number

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## Computing and information technology in the news ...

The collage features several news snippets:

- Companion Robots Are Here. Just Don't Fall in Love With Them**  
If we don't learn how to manage relationships with robots that look and act more like humans, we're in for heartbreak.
- Hackers Breached Colonial Pipeline Using Compromised Password**  
Investigators suspect hackers got password from dark web leak  
Colonial CEO hopes U.S. goes after criminal hackers abroad
- The computer chip industry has a dirty climate secret**  
As demand for chips surges, the semiconductor industry is trying to grapple with its huge carbon foot print
- Ex-Google workers sue company, saying it betrayed 'Don't Be Evil' motto**  
November 29, 2021 4:36 PM ET
- How Cambridge Analytica turned Facebook 'likes' into a lucrative political tool**  
The algorithm used in the Facebook data breach trawled through personal data for information on sexual orientation, race, gender - and even intelligence and childhood trauma
- Opinion: Artificial intelligence has a dark side — militaries around the world are using it in killing machines**
- THE FACEBOOK FILES**  
A Wall Street Journal investigation shows how the social media giant knows its products harm millions of people
- Toronto is debating smart park benches that track user behaviour**

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## Whose job is it?

**Regulators:** Can set legal rules, but often unfamiliar with new tech and its potential impact.

**Philosophers:** Can clarify debates and raise new issues, but few think about tech, most have limited influence.

**Business leaders** Have significant influence, but mostly interested in economic issues.

**Computing professionals:** Have the expertise in the technology, direct influence over design.

May be true even if your work is highly theoretical!



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## Value-Sensitive Design

Theory and methods on incorporating ethical values into design processes.

Techniques to consider a broader range of stakeholders, values, and effects.

“Ultimately, value sensitive design asks that the technical, civil, and other communities broaden the goals and criteria for judging the quality of technological systems to include those that advance human flourishing.” (p. 4)



[https://hollis.harvard.edu/bermalink/1/mfq5o5/TN\\_crdl\\_asknewsh/als\\_vlsbook\\_e\\_07802623542/06](https://hollis.harvard.edu/bermalink/1/mfq5o5/TN_crdl_asknewsh/als_vlsbook_e_07802623542/06)

<https://vdsdesign.org/>

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[original links redacted]

## Go to your group's link for Activity 1

Group 1: [bit.ly/abc123](https://bit.ly/abc123)

In this activity, we'll all work on the same case study.

Group 2: [bit.ly/abc123](https://bit.ly/abc123)

The proposed design is a change to social media that nudges users away from making toxic posts.

Group 3: [bit.ly/abc123](https://bit.ly/abc123)

Group 4: [bit.ly/abc123](https://bit.ly/abc123)

Group 5: [bit.ly/abc123](https://bit.ly/abc123)

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The following slides are the digital worksheet students received from the links above and completed in small groups over the next 20 minutes.

## CS 290 Embedded EthiCS | Activity 1 | Group 0

Read the case study on [slide 2](#).

Complete the value scenario worksheet on [slide 3](#). Feel free to move things around, add rows to tables, etc.

See these slides for pointers:

- Stakeholders ([slide 4](#))
- Values ([slide 5](#))
- Time ([slide 6](#))
- Pervasiveness ([slide 7](#))
- Recommendations ([slide 8](#))

## Social media nudging

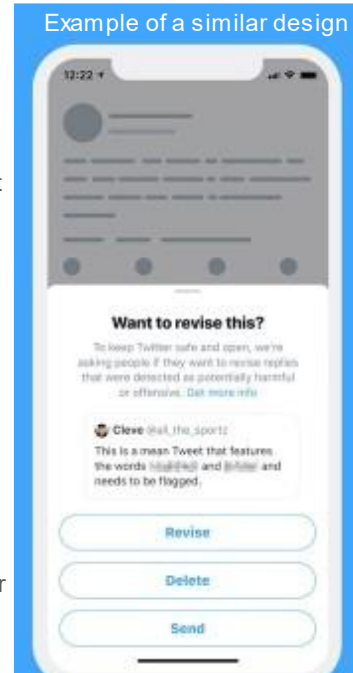
You are members of a team working on a new social media platform that aims to create a positive and safe space for teenagers .

Inspired by research that suggests that social media spaces are often toxic for young people, your team is considering a system to discourage potentially harmful posts .

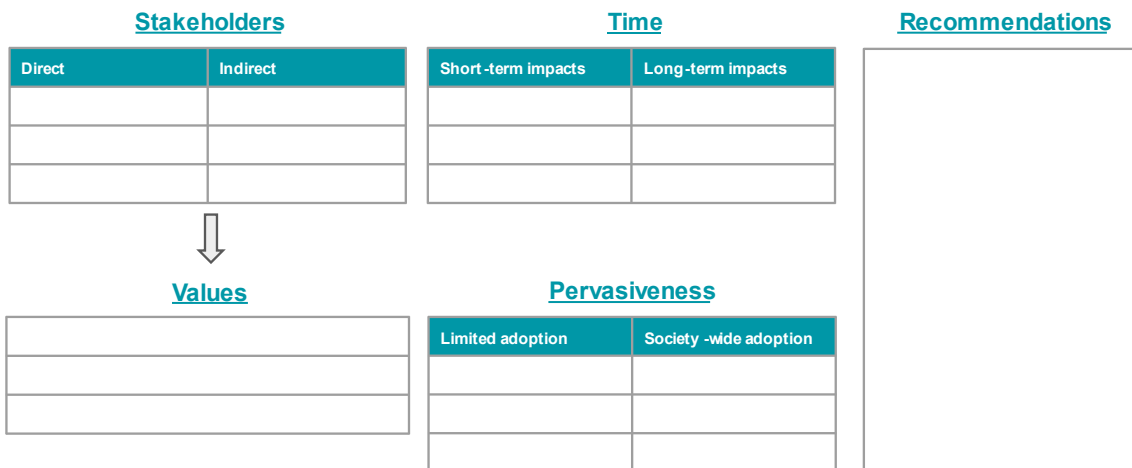
When a user finishes drafting a post and clicks “Submit,” the system shows them a preview of their post to confirm .

If potentially harmful content is detected (using a combination of AI and comparing the text to a list of “red flag” words), the confirmation screen adds a line reminding the user of the platform’s community standards.

The user is presented with a choice to revise the post, cancel the post, or publish the post as is.



## Social media nudging



## Stakeholders

**Direct stakeholders** are people directly impacted by the technology. A few examples:

- People who use the technology
- People on whom the technology is used

**Indirect stakeholders** are people who are impacted by the technology, but don't interact with it. A few examples:

- Family members of users
- People who can't access the technology

Note: Developers of the technology can also be direct or indirect stakeholders.

Be specific on the worksheet (e.g. "women who use the platform" rather than "users").

Table 2 in the reading (p. 7) has some additional guidance.

## Values

What do different stakeholders want or need?

What do they think is important?

Some examples of *ethical* values:

- Autonomy (the ability to decide what you do and what happens to you)
- Justice (fair treatment in society)
- Community (sense of belonging to a group)
- Flourishing (happiness and fulfillment in life)
- Safety and health (freedom from violence, access to food, water, shelter, etc.)

Table 4 in the reading (p. 7) has additional guidance.

## Time

What might the immediate and short -term (i.e., within a year of launch) impacts be of this technology?

What about the long -term impacts (i.e., multiple years after launch)?

Think about how the following short - and long -term impacts:

- How people might work differently
- How people's personal lives and relationships might be affected
- How differences in access to the technology might play out over time

**Connect these impacts to the stakeholders' values.**

Table 3 in the reading (p. 7) has additional guidance.

## Pervasiveness

What are the impacts of the technology when only a small group of people are affected?

Do these effects change as the technology becomes more widely adopted? How?

Consider:

- How might impacts change as the population **direct** stakeholders grows from 10 to 100 to 1000 or more?
- How might impacts change as the population **indirect** stakeholders grows from 10 to 100 to 1000 or more?
- What if the majority of people in society become direct or indirect stakeholders?
- Do the impacts change as the technology is adopted in different geographical locations?

**Connect these impacts to the stakeholders' values.**

Table 5 in the reading (p. 7) has additional guidance.

## Recommendations

Given the considerations you raised on the worksheet, what would you recommend to the developers?

Should the design be changed? Should it be pursued at all?

Are there potential problems that could emerge only as the technology is used over long periods of time, or becomes more pervasive in society? How can these be mitigated?

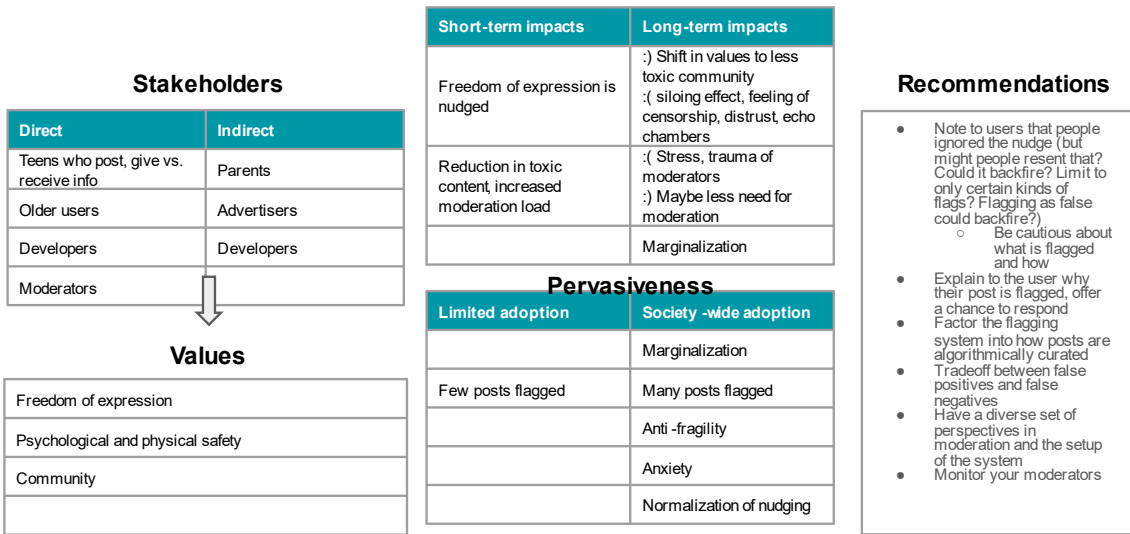
What tradeoffs between ethical and other values ( e.g. economic interests, political interests) might arise?

Taking up the discussion and following up on additional comments and questions took 35 minutes as a class.

## Discussion

# Social media nudging

[filled in during class from student comments]



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In the last 5 minutes, I assigned this follow-up reflection question for students to complete at home.

## Reflection Assignment

By end of day tomorrow (25 Feb), please complete the following assignment.

Write a paragraph (4–6 sentences) reflecting on your experience today engaging with valuesensitive design. Consider the following questions as a starting point:

- Did the activities prompt you to think about ethical issues in computer science that you hadn't considered before?
- If yes, what were they? How did the activity help?
- If no, why do you think the activity didn't help? Can you think of ways the activity could be changed to better suit the kinds of projects you're interested in?

Like everything else in this class, this will be graded as Complete / Incomplete. A response that fails to engage with the assignment (too short, unintelligible, keysmashes, etc.) will be graded Incomplete.

Go to this form to input your answer: [bit.ly/cs290homework](http://bit.ly/cs290homework)

You will also have the opportunity to offer feedback on this class session.

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## Professional Accreditation (Higher Education Academy)



### Certificate

This is to certify that

**Trystan Goetze**

has achieved the status of

**Associate Fellow**

of The Higher Education Academy

in recognition of attainment against the

**UK Professional Standards Framework** for  
teaching and learning support in higher education.

Recognition reference:

**PR110152**

Date of recognition

**25/07/2016**

**Professor Stephanie Marshall**

Chief Executive

The Higher Education Academy

**Professor Rama Thirunamachandran**

Chairman of the Board of Directors

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