

## **CISC 497 Social, Ethical and Legal Issues in Computing**

### **Instructor**

Dr. Catherine Stinson

### **Communication**

If you have a question or a problem you need help with, here are the places to try, in order:

1. Right here. Many of your questions can be answered in the syllabus, or the OnQ site.
2. In class or the Discourse discussion forum. Other students may have the same question.
3. Office hours. Asking questions and solving problems is what they are for. **You're welcome to attend the office hours for anyone on the teaching team.**
4. Email your TA. If the issue can't wait for class or office hours, and isn't suitable for Discourse, feel free to email your TA. Please put the course number in the Subject, and use your Queen's email account.
5. Email the Instructor. If none of the above options work, feel free to email the instructor with questions or problems. Please put the course number (and your Group) in the Subject, and use your Queen's email account.

### **Overview**

This course covers a wide range of topics of current importance in computing, including technical issues, professional questions, and moral and ethical decisions. Students explore topics through research, writing, discussion with classmates, guest speakers and in-class activities.

### **Learning Objectives**

- critically analyze legal, ethical and social issues related to computing
- evaluate information as a guide to beliefs and action
- explain cogently their position with regard to any legal, ethical or social issues
- communicate effectively in writing, discussing, and presenting
- evaluate issues in computing using professional codes of conduct

### **Course Delivery**

This course will consist of the following components:



- a 1 hour discussion section on Teams each week with your TA
- a discussion forum on Discourse
- weekly required readings (or videos or podcasts) posted to OnQ, to be done on your own time
- regular short quizzes and very short assignments on OnQ
- 2 group assignments.

Each student will be assigned to a group of about 25 students, each led by a TA. Your group has a channel on Teams. During class time, navigate to your group channel, and click the "meet now" button to join your discussion group. The groups will all be following the same discussion plan. Students will be posting Study Notes that you can look at in case you miss a class.

The course also has a discussion forum on Discourse. Most asynchronous discussion should happen there. If you have a question about a reading or assignment, want to find partners for a group assignment, or just stay connected, feel free to post on Discourse. Using Discourse does count as participation, but you're not required to use it.

All quizzes and assignment submissions should be done through OnQ. Small Assignments should ALSO be posted to Teams for the rest of your group to see.

## Schedule

Date	Topic	Required materials	Due
1: Jan 11	Introduction	Optional: <a href="https://www.moralmachine.net/">https://www.moralmachine.net/</a>	Quiz 1 (Jan 15)
2: Jan 18	Privacy in Ed-tech	<a href="#">article on proctoring software</a>  Extra: <a href="https://www.stopspying.org/s/Snooping-Where-We-Sleep-Final.pdf">https://www.stopspying.org/s/Snooping-Where-We-Sleep-Final.pdf</a>	Quiz 2 (Jan 18)
3: Jan 25	AGI and Existential Threat	<a href="#">paperclip maximizer animation</a> <a href="#">article written by GPT-3</a>  Extra: <a href="https://www.technologyreview.com/2019/06/06/239031/training-a-single-ai-model-can-emit-as-much-carbon-as-five-cars-in-their-lifetimes/">https://www.technologyreview.com/2019/06/06/239031/training-a-single-ai-model-can-emit-as-much-carbon-as-five-cars-in-their-lifetimes/</a>	SA 1 (Jan 31)
4: Feb 1	Hidden Costs of Computing	<a href="#">article on the gig economy</a> <a href="#">video about blood minerals</a>  Extra: <a href="https://www.bbc.com/future/article/20161017-your-old-phone-is-full-of-precious-metals">https://www.bbc.com/future/article/20161017-your-old-phone-is-full-of-precious-metals</a>	Quiz 3 (Feb 1)
5: Feb 8	Biometric surveillance	 <a href="#">Coded Bias</a>  Extra: <a href="https://www.washingtonpost.com/technology/2020/12/08/huawei-tested-ai-software-that-could-recognize-uighur-minorities-alert-police-report-says/">https://www.washingtonpost.com/technology/2020/12/08/huawei-tested-ai-software-that-could-recognize-uighur-minorities-alert-police-report-says/</a>	Quiz 4 (Feb 8)
Reading Week			
6: Feb 22	Codes of Ethics and Impact Statements	<a href="#">article on impact statements in peer review</a>  Extra: <a href="https://www.acm.org/code-of-ethics">https://www.acm.org/code-of-ethics</a>	SA 2 (Feb 26)
7: Mar 1	Surveillance Capitalism	 <a href="#">The Great Hack</a> (on Netflix) OR <a href="#">article about the film</a>  Extra: <a href="https://www.diggitmagazine.com/papers/pok-mon-go-self-tracking-application">https://www.diggitmagazine.com/papers/pok-mon-go-self-tracking-application</a>	Quiz 5 (Mar 1)

8: Mar 8	(Un)expected Consequences and Responsibility	<a href="#">podcast about DIY drones</a> Extra: <a href="https://www.theatlantic.com/technology/archive/2015/12/the-moral-failure-of-computer-science/420012/">https://www.theatlantic.com/technology/archive/2015/12/the-moral-failure-of-computer-science/420012/</a>	Quiz 6 (Mar 8)
9: Mar 14	Youtube and Radicalization	<a href="#">video about radicalization</a> <a href="#">full text of article</a> Extra: <a href="https://www.wired.com/story/opinion-platforms-must-pay-for-their-role-in-the-insurrection/">https://www.wired.com/story/opinion-platforms-must-pay-for-their-role-in-the-insurrection/</a>	Quiz 7 (Mar 14)  Ethics Review (Mar 18)
10: Mar 22	Conflicts of Interest	<a href="#">article on tech sponsored research</a> OR <a href="#">lecture about the article</a> Extra: <a href="https://www.technologyreview.com/2020/12/04/1013294/google-ai-ethics-research-paper-forced-out-timnit-gebru/">https://www.technologyreview.com/2020/12/04/1013294/google-ai-ethics-research-paper-forced-out-timnit-gebru/</a>	SA 3 (Mar 26)
11: Mar 29	Design Fails and How to Avoid them	<a href="#">design for real life interview</a> Extra: <a href="https://www.technologyreview.com/2020/12/21/1015303/stanford-vaccine-algorithm/">https://www.technologyreview.com/2020/12/21/1015303/stanford-vaccine-algorithm/</a>	Quiz 8 (Mar 29)
12: April 5	Video Presentations	n/a	Video (Apr 3)

### Assessment

15%	Participation
25%	Quizzes (5% x 5)
15%	Small Assignments (5% x 3)
25%	Ethics Review
20%	Video

### Participation

This is meant to be an active learning course, with a focus on communication skills. It will be challenging to do this virtually, but you can help by showing up for class and making an effort to participate. Your TAs will be leading you through discussion activities. Participation in these (whether out loud, with gestures, or through the chat) is the main point of the course. Outside of class time you can use Discourse to participate and stay connected. Please talk to your TA or the instructor if there are barriers to you participating fully through Teams and/or Discourse.

### Quizzes

There will be short, untimed, open book quizzes throughout the course. Most of them will ask you to write a brief response to a reading, video or podcast. Your best 5 quizzes will count. These are due before class, to prepare you for the discussion, but will remain open longer for late submissions.

### **Small Assignments** (due Jan 31, Feb 26, March 26)

Do any **three** of the following assignments:

- a) Write 1 page of study notes (max 500 words) summarizing the main points from 1 class discussion, suitable for a student who was absent. Sign up with your TA at least 1 week in advance. Spots are limited. (may only be done once)
- b) Make a meme expressing an informed position on an issue addressed in the course. (may only be done once)
- c) Watch a Sci Fi film that covers a social, ethical or legal issue in computing. Screenshot the part you found most interesting, and write a short (max 100 word) blurb expressing what was interesting about the film. (may only be done once)
- d) Read one of the articles marked "Extra" on the schedule, or a chapter from a book on the list provided. Choose a quote that you found most interesting, and write a short (max 100 words) blurb expressing what was interesting about the article/chapter.
- e) Watch an online talk from the list provided. Screenshot the part you found most interesting, and write a short (max 100 word) blurb expressing what was interesting about the talk.
- f) Listen to a podcast from the list provided. Choose a quote that you found most interesting, and write a short (max 100 words) blurb expressing what was interesting about the podcast.

Each assignment should fit on 1 page.

Post a PDF or image file to your group channel on Teams AND submit it in OnQ.

### **Ethics Review** (due March 18)

This assignment should be done in teams of 3-4 students.

- Pick a computing project that a team member is doing for a course, internship, or other research.
- Write a broader impact statement for the project, following the advice [here](#), and [here](#).
- Write a reflection on the experience. What was difficult, surprising, worthwhile, useless, ...?  
Should impact statements be required for journals and conferences? Does your team all agree?

One report of 1500 - 2000 words should be submitted by the team.

Each student will have the chance to fill out a feedback survey about how the workload was divided. Team members not pulling their weight may receive lower grades.

### **Video** (due April 3)

You may work alone or in pairs for this assignment.

Produce a 2-3 minute video that does **one** of the following:

- a) explain a concept you learned in the course in an accessible and entertaining way.
- b) inform viewers about a social/ethical/legal problem with commonly used technology, and offer a solution or a call to action.
- c) pitch an original idea for a dystopian Sci Fi story about technology gone awry.

Your video will be shown in class on April 5.