

# Advanced Studies of Information & Communication Technology

Tuesdays 2.30–5.30pm, Ontario 206

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SOCY 422  
Fall 2019

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## Course description

Popular and scholarly accounts of information and communication technology in the 1990s were optimistic about information and communication technologies, for example in terms of productivity or about their liberatory potentials. The hope was that because bodies would 'disappear,' so would traditional markers of difference: race, gender, sexuality, class, and ability would become more malleable, more open to playful re-interpretation, or even become irrelevant. Work, it was said, would become more efficient through the introduction of ICTs and thereby improve working conditions and quality of life. More recent work takes a much more critical stance towards these technologies. Not only have ICTs not fulfilled their promise, some are exacerbating social and economic inequalities: From hate speech over filter bubbles to precarious labor, data-driven technologies interlock across institutions, producing and reproducing social problems in the process. Against this backdrop, the aim of this course is for students to obtain a more nuanced understanding about the various ways in which information and communication technologies are involved in maintaining or disrupting social order, paying particular attention to questions of power and social inequalities.

## Learning objectives

Through this course, you should gain:

- an *appreciation* of the ambivalent role of technology for liberatory purposes;
- *knowledge and understanding* of different conceptualizations of technology in relation to power and politics, as well as the ability to identify and describe key questions and concerns about the various ways in which technologies may be involved in maintaining or disrupting social orders;
- *writing skills*: academic writing doesn't come naturally and needs to be learned and exercised. I have designed the assignments so they break down the process of writing a term paper into smaller tasks. This will help you build up material throughout the course which you can draw on when the time comes to write the term paper.

## Organization

The course will be taught through one seminar per week. Seminars will be a mixture of short lectures, discussions, presentations, and workshops.

## Expectations & assignments

The course is more reading intensive than usual, because there are so many interesting new books and articles coming out at the moment that I want to discuss with you. To offset the higher reading workload, written assignments are shorter than usual; but more will ride on your in-class engagement with the readings.

- *Participation*. This is a seminar course, and as such you will get the most out of it if you actively participate. I expect you to engage in meaningful discussion based on your thoughtful reading of the texts. Coming to class prepared – bringing your notes and questions – will be crucial to do so successfully.
- *Weekly reading reflections*. Each class I will set aside time for you to react to the readings in written form, based on a question I will give you. I expect you to demonstrate that you have read the text, that you have understood the basics of the author's argument, and that you can generate some questions about the argument's conceptual and/or practical implications.
- *Presentation and discussion leadership*. You will give a brief presentation (ca. 15 mins) in which you'll analyze a current event or controversy related to course topics. You may use this presentation to build up to the final written assignment. After your presentation, you will lead and moderate the class discussion for about 15-20 minutes. You have to email me 5 discussion questions by 12pm the day before your scheduled presentation. I will evaluate the relevance of your topic for themes in this course, and the effectiveness of your discussion leadership.

- A *book review* of: D'Ignazio, Catherine and Lauren Klein (2019). *Data Feminism*. Cambridge: MIT Press (900-1100 words excl. references, double-spaced). This book explores several of the themes of this course, and your task is to assess the book with the knowledge you learn here. The purpose of a book review is not (only) to summarize the content of the book, but to situate its merit and to critically evaluate the author's purpose, claims, methods, and evidence. I will evaluate how well you are able to comment on (a) how convincing the authors present their claims, as well as on (b) the book's import to our understandings of the politics of data and data science in society.
- An *op-ed* (ca. 750 words) on current issues or developments related to course topics. An op-ed is an brief but *informed* opinion piece meant to convince a broader audience of your perspective on a current debate. I will evaluate (a) how well you justify the relevance of your topic; (b) how well you articulate the point you're arguing; and (c) how well you articulate specific recommendations that follow from your argument.

### Grading, submission & deadlines

All written assignments have to be submitted through onQ. I can only grant you extensions in exceptional cases and if you supply proof (i.e. a QSAS accommodation). Note that in all other cases I will take 5% off your grade per day. Grading and due dates are as follows:

Grade component	Due dates	Weight
Participation	weeks 3-12	20%
Reading reflections	weeks 3-12	20%
Presentation	weeks 3-12	20%
Book review	week 7	20%
Op-ed	week 13	20%

For your final grade, your numerical course average then will be converted to a letter grade according to the Queen's Official Grade Conversion Scale.

Grade	Numerical Range
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

### **Readings and resources**

All readings will be available via onQ. Note that this material is copyrighted and is for the sole use of students registered in the course. This material shall not be distributed or disseminated to anyone other than students registered in the course. Failure to abide by these conditions is a breach of copyright, and may also constitute a breach of academic integrity under the University Senate's Academic Integrity Policy Statement.

### **Copyright of Course Materials**

Course materials created by the course instructor, including all slides, presentations, handouts, tests, exams, and other similar course materials, are the intellectual property of the instructor. It is a departure from academic integrity to distribute, publicly post, sell or otherwise disseminate an instructor's course materials or to provide an instructor's course materials to anyone else for distribution, posting, sale or other means of dissemination, without the instructor's express consent. A student who engages in such conduct may be subject to penalty for a departure from academic integrity and may also face adverse legal consequences for infringement of intellectual property rights.

## Academic Integrity

Queen's students, faculty, administrators and staff all have responsibilities for supporting and upholding the fundamental values of academic integrity. Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see [www.academicintegrity.org](http://www.academicintegrity.org)) and by the quality of courage. These values and qualities are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the [Senate Report on Principles and Priorities](#)).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments and their behaviour conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see [Academic Regulation 1](#)), on the [Arts and Science website](#), and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Be especially mindful of unintended plagiarism. Regardless of how and where you retrieve information, the principles of academic integrity apply. Please visit these helpful websites to help you make sure that you are able to write things in your own words:

- Resources from [Queen's University](#)
- Resources from [MIT](#)
- Resources from [The University of Wisconsin](#)

## Accommodation for disabilities

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the QSAS website.

## **Academic considerations for students in extenuating circumstances**

Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances that are beyond their control and are interfering with their ability to complete academic requirements related to a course for a short period of time. The Senate Policy on Academic Consideration for Students in Extenuating Circumstances is available [here](#).

Each Faculty has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances. Arts and Science undergraduate students can find the Faculty of Arts and Science protocol and the portal where a request can be submitted at: <http://www.queensu.ca/artsci/accommodations>. Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

If you need to request academic consideration for this course, you will be required to provide the name and email address of the instructor/coordinator. Please use the contact information given at the beginning of this syllabus.

# Course schedule & readings

Week	Dates	Topics
1	Sept 10	Introduction
*	***	<b>Part I: History, epistemology, institutions</b>
2	Sept 17	Data, categories, and problems of knowing
3	Sept 24	Power, politics & the state
4	Oct 1	Digital capitalism I: Organizations & institutions
5	Oct 8	Digital capitalism II: Data, markets, stratification
*	***	<b>Part II: Social problems in the digital age</b>
6	Oct 15	Capitalizing on hate: The economic value of attention
7	Oct 22	Capitalizing on conflict I: The political value of (dis)information
8	Oct 29	Capitalizing on conflict II: The Great Hack
9	Nov 5	Capitalizing on crime: PredPol and e-carceration
10	Nov 12	Capitalizing on inequality: Job ad & hiring algorithms
11	Nov 19	Capitalizing on poverty: Lower Ed
12	Nov 26	What now? Some questions about regulation

## Sept 10: Introduction

- Barlow, John Perry (1996). A Declaration of the Independence of Cyberspace.
- Wired staff (2016-08-24). "Dear Internet: It's Time to Fix This Mess You Made". In: Wired.

## Sept 17: Data, categories, and problems of knowing

- D'Ignazio, Catherine and Lauren Klein (2019). Data Feminism. Cambridge: MIT Press. Prepare the following chapters for discussion in class:
  - "Introduction"

- “Chapter Three: What Gets Counted Counts”
- “Chapter Seven: The Power Chapter”

### **Sept 24: Power, politics & the state**

- Möllers, Norma (under review). “Making digital territory: Cybersecurity, techno-nationalism, and the moral boundaries of the state”. In: *Science, Technology, & Human Values*.
- Eubanks, Virginia (2017). *Automating inequality: How high-tech tools profile, police, and punish the poor*. First Edition. New York, NY: St. Martin’s Press, “Introduction,” “High-tech homelessness in the City of Angels.”

### **Oct 1: Digital capitalism I: Organizations & institutions**

- Rahman, K. Sabeel and Kathleen Thelen (2019). “The Rise of the Platform Business Model and the Transformation of Twenty-First-Century Capitalism”. In: *Politics & Society* 47.2, pp. 177–204.
- Srnicek, Nick (2017). *Platform capitalism*. Cambridge and Malden, MA: Polity, Ch. 2. “Platform capitalism.”

### **Oct 8: Digital capitalism II: Data, markets, stratification**

- Fourcade, Marion and Kieran Healy (2017). “Seeing like a market”. In: *Socio-Economic Review* 15.1, pp. 9–29.
- Zuboff, Shoshana (2015). “Big other: Surveillance capitalism and the prospects of an information civilization”. In: *Journal of Information Technology* 30.1, pp. 75–89.
- Couldry, Nick and Ulises A. Mejias (2018). “Data Colonialism: Rethinking Big Data’s Relation to the Contemporary Subject”. In: *Television & New Media* 33.4, pp. 1–14.

### **Oct 15: Capitalizing on hate: The economic value of attention**

- Jane, Emma Alice (2014). “‘Back to the kitchen, cunt’: Speaking the unspeakable about online misogyny”. In: *Continuum* 28.4, pp. 558–570.
- Roberts, Sarah T. (2015). “Commercial Content Moderation: Digital Laborers’ Dirty Work”. In: *The intersectional Internet*. Ed. by Safiya Umoja Noble and Brendesha M. Tynes. New York: Peter Lang, pp. 147–160.
- Gillespie, Tarleton (2018). *Custodians of the internet: Platforms, content moderation, and the hidden decisions that shape social media*. New Haven: Yale University Press, “The myth of the neutral platform.”

### **Oct 22: Capitalizing on conflict I: The political value of (dis)information**

- Tufekci, Zeynep (2017). *Twitter and tear gas: The power and fragility of networked protest*. New Haven and London: Yale University Press, "Platforms and algorithms."
- Howard, Philip N., Samuel Woolley, and Ryan Calo (2018). "Algorithms, bots, and political communication in the US 2016 election: The challenge of automated political communication for election law and administration". In: *Journal of Information Technology & Politics* 15.2, pp. 81–93.
- Noble, Safiya Umoja (2018). *Algorithms of oppression: How search engines reinforce racism*. New York: New York University Press, "Searching for people and communities."

### **Oct 29: Capitalizing on conflict II: The Great Hack**

- No reading – we'll watch and discuss "The Great Hack" in class.

### **Nov 5: Capitalizing on inequality: Job ad & hiring algorithms**

- Bertrand, Marianne and Sendhil Mullainathan (2003). *Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination*. Cambridge, MA: National Bureau of Economic Research.
- O'Neil, Cathy (2016). *Weapons of math destruction: How big data increases inequality and threatens democracy*. New York: Crown, "Ineligible to serve: Getting a job."
- Bogen, Miranda (2019-05-06). "All the Ways Hiring Algorithms Can Introduce Bias". In: *Harvard Business Review*.
- Tobin, Ariana and Jeremy B. Merrill (2018-09-18). "Facebook Is Letting Job Advertisers Target Only Men". In: *ProPublica*.

### **Nov 12: Capitalizing on poverty: Lower Ed**

- O'Neil, Cathy (2016). *Weapons of math destruction: How big data increases inequality and threatens democracy*. New York: Crown, "Propaganda machine: Online advertising."
- Cottom, Tressie McMillan (2017). *Lower ed: The troubling rise of for-profit colleges in the new economy*. New York: The New Press, "Introduction," "Jesus Is My Backup Plan," "Credentials, Jobs, and the New Economy."

### **Nov 19: Capitalizing on crime: PredPol and e-carceration**

- Wang, Jackie (2018). *Carceral capitalism*. Cambridge: MIT Press, "Introduction" (read pp. 34-51, skim the rest).
- Brayne, Sarah (2017). "Big Data Surveillance: The Case of Policing". In: *American Sociological Review* 82.5, pp. 977–1008.
- Angwin, Julia, Jeff Larson, Lauren Kirchner, and Surya Mattu (2016-05-23). "Machine Bias". In: ProPublica.

### **Nov 26: What now? Some questions about regulation**

- Noble, Safiya Umoja (2018). *Algorithms of oppression: How search engines reinforce racism*. New York: New York University Press, "Searching for protection from search engines."
- Pasquale, Frank (2015). *The black box society: The secret algorithms that control money and information*. Cambridge: Harvard University Press, "Watching (and improving) the watchers."