

University of Waterloo
Faculty of Arts | Stratford School
Global Business and Digital Arts 303
Data & Society | Fall 2019

Course Director: Philip J. Boyle
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Class Hours: Section 1: Tues 10-11:50am; Section 2: Tues 1:30-3:20pm
Lab Hours: Section 1: Fri 9-9:50am; Section 2: Fri 1-1:50pm
Office Hours: Tuesdays & Fridays by drop-in and appointment (Stratford)
Classroom: Seminars: DMS 3129; Labs: DMS 1004

Course Description

In this course students will examine different digital phenomena, such as big data, open data, data-driven innovation, the personal information industry, the sharing economy, and the internet of things. Students will also become familiar with national and international principles of privacy protection.

Course Goals and Learning Outcomes

- Students will, through a series of directed and self-selected topical analyses, become familiar with a series of analytical and topical themes pertinent to living and working in a time of rapid technological change
- Students will be familiar with the strengths and shortcomings of the fair information practice principles (FIPPs) in the context of the digital information economy

A Note on Expectations

This course will have more academic content than a studio or skills acquisition course. This means that you will be expected to read, think, synthesize, and apply ideas rather than memorize and recall information. Most of all, you will be expected to communicate through your writing clearly and effectively. Grades of 85%+ are reserved for students who exceed expectations for deliverables, not for merely meeting expectations.

Tuesday classes will run accord to seminar format as much as possible, meaning a mix of lecture and directed discussion or activity. My expectation for Tuesday seminars is that you will have read all assigned material before class and be prepared to discuss the material each and every meeting. The success of our seminar time together depends upon you doing so.

The format of Friday laboratories will vary over the semester and may be used for exam purposes.

Required Resources

All assigned reading material for this course is available on Learn.

Course Deliverables & Assessment

Students will be assessed through the following deliverables:

<u>Assignment</u>	<u>Weight</u>	<u>Due Date</u>
Small Assignments (7)	20% (4% each)	Throughout semester
Film Analysis	20%	Oct 11
Privacy Policy Assessment	20%	Nov 22
Midterm Exam	20%	Oct 29
Final Exam	20%	Dec 3

Small Assignments – 20%

Seven small in-class assignments will be administered during the semester. These assignments may consist of in-class quizzes, short written responses, or other formats as determined by the instructor. These are ‘surprise’ assignments to be completed in class. The two lowest grades, including missed assignments, if any, will be dropped from the calculation of your final grade. There are no make-ups or re-dos for missed small assignments. The assignments may be uploaded to Learn (preferred) or submitted in hard copy.

Film Analysis – 20%

You are required to write a 7-page analysis of the films *Terms and Conditions May Apply* and *The Great Hack*. Both films are widely available on Netflix, Vimeo, YouTube, and other sources. Your analysis should not be a summary of the films. Instead, you should focus on main points of overlap or difference between the films, particularly strong or weak components of the films, the main message(s) impressed upon you by the films, and the reasons why you think others should (or should not) watch the films. Keep in mind that the films were produced several years apart from one another. This assignment must be uploaded to Learn.

Privacy Assessment – 20%

You are required to write a 7-page assessment of the privacy policy of any free social media platform of your choosing. Your assessment should focus on whether, and to what extent, the policy in question adheres to the Fair Information Practice Principles as they are articulated in the Privacy Commissioner of Canada’s *Privacy Toolkit*. The report should be written in paragraph form (i.e., no checklists) and be clear, concise, and specific. You do not need to explain your assessment for each principle but you must provide evidence to justify your overall assessment. Your final report should include a letter grade that indicates your assessment of the policy (see below). This assignment must be uploaded to Learn

Midterm & Final Exam – 20% each

Exams are in class and will be a combination of multiple choice and short and long answer written response. The final exam will be cumulative.

Privacy Assessment Rubric (to be used in Privacy Assessment)

A/A-	Policy adheres to all of the fair information practice principles and is written in clear and accessible manner.
B/B-	Policy adheres to most of the fair information practice principles but small deviations are evident. Policy is mostly readable but has some legalese.
C/C-	Policy has noticeable departures/omissions from the fair information practice principles and is difficult to read from a layperson's perspective.
D/D-	Policy falls short of most of the fair information practice principles and/or is written in the spirit of legal disclosure.
Fail	No attempt to identify or meet fair information practice principles. Policy exists to shield company from legal proceedings.

Grading Rubric for Written Assignments (Film Review & Privacy Assessment)

Superior 85%+	Deliverable does superior overall job on all aspects of the assignment. Writing is clear and concise with few or no spelling/grammatical errors.
Very good 75-84%	Deliverable does very good job on all aspects of the assignment. Some weaknesses are evident in the writing, such as unclear sentences or jumps in flow between sentences and/or paragraphs, but the work is well done on the whole. Some grammatical and/or spelling errors are present.
Satisfactory 65-74%	Deliverable accomplishes objective of assignment but may be weak overall. An argument is not clear or substantiated. Flaws in writing evident but overall message is understandable. Some grammatical and/or spelling errors are present.
65%- Fail	Deliverable misses objective of assignment. Pronounced flaws in writing and clear in attention to grammar and spelling.

Course Schedule & Reading List – dates with ‘L’ denote Laboratories

All lectures, discussions, and in-class assignments will be based on the readings listed below. You are expected to read all of the listed material before coming to class. Do not leave your reading to the night before as the readings are scholarly in nature and will take some time to work through.

Sept 10: Introduction to Course

Sept 13(L): Introduction to Privacy Assessment Assignment

Reading: Turow (2018), *Let's Retire the Phrase 'Privacy Policy'*
Litman-Navarro (2019), *We Read 150 Privacy Policies. They were an Incomprehensible Disaster*

Part I: Privacy in the Digital Age

Sept 17: Welcome to Surveillance Capitalism

Reading: Zuboff (2015), *Big Other: Surveillance Capitalism and the Prospects of an Information Civilization*
Esteve (2017), *The Business of Personal Data: Google, Facebook, and Privacy Issues in the EU and USA*

Sept 20(L): Film Discussion, *Terms & Conditions May Apply* [watch film in advance!]

Sept 24: Information Privacy: The Fair Information Practices Principles (& Film Discussion)

Reading: Hartzog (2017), *The Invaluable, Inadequate Fair Information Practices*

Sept 27(L): FIPPs Discussion

Oct 1: In-class film: *The Great Hack*

Oct 4(L): Film Discussion: *The Great Hack*

Oct 8: Institutional & Regulatory Systems for Privacy: Canada, USA, & EU

Reading: Levin & Nicholson (2005), *Privacy Law in the United States, the EU and Canada: The Allure of the Middle Ground*

Oct 11(L): No Lab – Film Analysis Due by 11:59pm [upload to Learn]

Oct 22: The Globalization of Privacy?: The EU General Data Protection Regulation (GDPR)

Reading: Bennett (2018), *The European Data Protection Regulation: An Instrument for the Globalization of Privacy Standards?*

Oct 25(L): Midterm Exam Review

Oct 29: Midterm Exam

Nov 1(L): Privacy Assessment Assignment con't

Part II: Data & Disruptive Innovation

- Nov 5: The Sharing Economy as Disruptive Innovation (& What is Disruptive Innovation?)
Reading: Bower & Christensen (1995), *Disruptive Technologies: Catching the Wave*
Slee (2016), Chapter 3 from *What's Yours is Mine*, "A Place to Stay..."
Slee (2016), Chapter 4 from *What's Yours is Mine*, "On the Move with Uber"
- Nov 8(L): Privacy Assessment Assignment con't
- Nov 12: Algorithms
Reading: Gillespie (2015), *The Relevance of Algorithms*
Ito (2019), *Supposedly Fair Algorithms can Perpetuate Discrimination*
Eubanks (2018), *Algorithms Designed to Fight Poverty can Make it Worse*
Badger (2019), *Who's to Blame when Algorithms Discriminate?*
- Nov 15(L): Privacy Assessment Assignment con't
- Nov 19: The Internet of Things
Reading: Ziegeldorf et. al. (2013), *Privacy in the Internet of Things: Threats and Challenges*
Cavoukian & Popa (2016), *Embedding Privacy into What's Next: Privacy by Design and the Internet of Things*
- Nov 22(L): Privacy Assessment Assignment con't [due 11:59pm upload to Learn]
- Nov 26: Smart Cities & Automated Justice
Readings Kitchin (2014), *The Real-Time City? Big Data & Smart Urbanism*
Branye (2017), *Big Data Surveillance: The Case of Policing*
- Nov 29(L): Final Exam Review
- Dec 3: Final Exam

Classroom Policies

Please read and observe the following classroom policies. The University's policies on Academic Integrity and Accommodation for Students with Disabilities appear below. You are expected to adhere to all classroom and University policies.

Attendance Policy

You are expected to attend all classes and tutorials. Absences, especially when group work in tutorials is scheduled, should be avoided unless absolutely necessary due to reasons acceptable to the University. Travel plans are not acceptable reasons for requesting alternative due dates.

Late Submission Policy

All assignments must be submitted on the due date. Late assignments will be penalized at 5% of the value of the assignment per day.

Electronic Device Policy

Laptop computers and/or tablets may be used in the classroom for learning purposes only. All other uses are prohibited. Mobile phones should be turned off and stored until the end of class. Do not take selfies in class (I'm not kidding – it happens). Do not wear headphones in class. Making audio/video recording of class lectures or tutorials without permission is prohibited. You may be asked to leave the classroom if any use of technology is disruptive.

Email Policy

Please keep email correspondence to a minimum. I will strive to respond to all emails I receive within one business day, but most questions can be answered by consulting the course outline, asking your colleagues, or waiting until the next time we meet.

Format of Written Assignments

Your written assignments should include a cover page with the title of the assignment, your name and student ID number, the course name, my name, and the date.

University Policies

Academic Integrity

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity Webpage \(https://uwaterloo.ca/academic-integrity/\)](https://uwaterloo.ca/academic-integrity/) and the [Arts Academic Integrity Office Webpage \(http://arts.uwaterloo.ca/current-undergraduates/academic-responsibility\)](http://arts.uwaterloo.ca/current-undergraduates/academic-responsibility) for more information.

Grievance

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70, Student Petitions and Grievances, Section 4 \(https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70\)](https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70). When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline

A student is expected to know what constitutes academic integrity to avoid committing academic offenses and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the undergraduate associate dean. For information on categories of offenses and types of penalties, students should refer to [Policy 71, Student Discipline \(http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm\)](http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm). For typical penalties check [Guidelines for the Assessment of Penalties \(http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm\)](http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm).

Appeals

A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72, Student Appeals \(http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm\)](http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm).

Note for Students with Disabilities

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Course Reading List Bibliography

- Bennett, C. 2018. The European Data Protection Regulation: An Instrument for the Globalization of Privacy Standards? *Information Polity* 23: 239-246.
- Bower, J. & C. Christensen. 1995. Disruptive Technologies: Catching the Wave. *Harvard Business Review* 73(1): 43-53.
- Branye, S. 2017. Big Data Surveillance: The Case of Policing. *American Sociological Review* 82(5): 977-1008.
- Cavoukian, A. & C. Popa. 2016. *Embedding Privacy into What's Next: Privacy by Design and the Internet of Things*. Privacy & Big Data Institute, Ryerson University.
- Esteve, A. 2017. The Business of Personal Data: Google, Facebook, and Privacy Issues in the EU and USA. *International Data Privacy Law* 7(1): 36-47.
- Gillespie, T. 2015. The Relevance of Algorithms. In B. Peters (ed.), *Digital Keywords: A Vocabulary of Information, Society, & Culture*, pgs. 18-30. Princeton University Press.
- Hartzog, W. 2017. The Invaluable, Inadequate Fair Information Practices. *Maryland Law Review* 76(4): 592-983.
- Kitchin, R. 2014. The Real-Time City? Big Data & Smart Urbanism. *GeoJournal* 79: 1-14.
- Levin, A. & M. Nicholson. 2005. Privacy Law in the United States, the EU and Canada: The Allure of the Middle Ground. *University of Ottawa Law & Technology Journal* 2(2): 357-395.
- Litman-Navarro, K. 2019. We Read 150 Privacy Policies. They were an Incomprehensible Disaster. *The New York Times* (online). Available at www.nytimes.com/interactive/2019/06/12/opinion/facebook-google-privacy-policies.html
- OPC. 2015. *Privacy Toolkit for Businesses*. Ottawa: Office of the Privacy Commissioner of Canada.
- Slee, T. 2017. *What's Yours is Mine: Against the Sharing Economy*. OR Books.
- Turrow, J. 2018, Aug 20. Let's Retire the Phrase 'Privacy Policy'. *New York Times* (online). Available at <https://www.nytimes.com/2018/08/20/opinion/20Turow.html>
- Ziegeldorf, J., O. Morchon, & K. Wehrle. 2014. Privacy in the Internet of Things: Threats & Challenges. *Security & Communication Networks* 7: 2728-2742.
- Zuboff, S. 2015. Big Other: Surveillance Capitalism and the Prospects of an Information Civilization. *Journal of Information Technology* 30: 75-89.