**INFO 1200 / STS 1201:**

**Information Ethics, Law, and Policy**

(Spring 2020)

 (**version: 2 April 2020, updated to reflect move to virtual instruction**)

**Instructors:**

**Steven Jackson**

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Open zoom office hours: Mon and Weds 1:25-2:15 EST:

**https://cornell.zoom.us/my/stevenjackson**

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**607-255-2347**

**Karen Levy**

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**virtual** office hours: by appointment, schedule here: <https://karenlevy.youcanbook.me/> **and meet here:** [**https://cornell.zoom.us/my/karenzoom**](https://cornell.zoom.us/my/karenzoom)

**Course Learning Specialist**:

Hui Yang

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**virtual** office hours: **Thu 10:00-noon or by appointment, meet here: [https://cornell.zoom.us/my/huiyang](https://cornell.zoom.us/my/huiyang%22%20%5Ct%20%22_blank)**

**Graduate TAs and virtual office hours:**

Fernando Delgado, fad33, Thu 10:30 am-12:30 pm, [https://cornell.zoom.us/j/4181832216](https://cornell.zoom.us/j/4181832216%22%20%5Ct%20%22_blank)

Alex Henning, aph94, Fri 10:00-11:00 am, [https://zoom.us/j/5839459750](https://zoom.us/j/5839459750%22%20%5Ct%20%22_blank)

Jen Liu, jl3835, Thu 2:30-3:30 pm, <https://cornell.zoom.us/j/5253416583>

Maya Mundell, mhm223, (TBA)

Samir Passi, sp966, Tue 9-10:30 am, Thu 12-1:30pm, <https://cornell.zoom.us/j/2695724851>

Sarah Riley, sr2227, Fri 10-11 am, <https://cornell.zoom.us/j/4352835198>

Korica Simon, kjs342, Thu 9-10 am, Fri 3-4 pm, <https://cornell.zoom.us/j/5050583572>

**Lectures:**

Pre-closure:Mon/Weds, 1:25-2:15, Statler Hall 185

**Post-closure: lectures will be recorded and available on Canvas on the regular M/W course schedule, beginning April 6. You should plan to view the recordings on or around our regular schedule.**

**Sections:**

Pre-closure:

Sec 201: Friday 10:10-11:00, Snee 1150 (TA: Korica Simon; ugrad: Vivian Fan)

Sec 202: Friday 11:15-12:05, Phillips 407 (TA: Sarah Riley; ugrad: Catherine Kwak)

Sec 203: Friday 11:15-12:05, Snee 1150 (TA: Korica Simon; ugrad: Junhan Zeng)

Sec 204: Friday 1:25-2:15, Phillips 403 (TA: Alex Henning; ugrad: Max Coleman)

Sec 205: Friday 1:25-2:15, Snee 1150 (TA: Jen Liu; ugrad: Ishaan Bakhle)

Sec 206: Friday 2:30-3:20, Snee 1150 (TA: Fernando Delgado; ugrad: David Larar)

Sec 207: Friday 12:20-1:10, Snee 1150 (TA: Jen Liu; ugrad: Christian Baran)

Sec 208: Friday 9:05-9:55, Phillips 403 (TA: Sarah Riley; ugrad: Hannah Portes)

Sec 209: Thursday 2:30-3:20 Phillips 403 (TA: Maya Mundell; ugrad: Zoe Gonzalez-Llorens)

Sec 210: Thursday 3:35-4:25 Snee 1150 (TA: Maya Mundell; ugrad: Zoe Gonzalez-Llorens)

Sec 211: Friday 10:10-11:00 Phillips 403 (TA: Samir Passi; ugrad: Hannah Portes)

Sec 212: Friday 9:05-9:55 Snee 1150 (TA: Samir Passi ; ugrad: Ishaan Bakhle)

Sec 213: Friday 11:15-12:05 Upson 206 (TA: Alex Henning; ugrad: Christian Baran)

Sec 214: Friday 1:25-2:15 Upson 216 (TA: Fernando Delgado; ugrad: David Larar)

**Post-closure: sections will be operating on new plans that will include a mixture of real-time discussion and asynchronous activities. Please see your revised section syllabus from your TA for details for your section.**

**OVERVIEW**:

This course investigates the ethical, legal, and policy foundations of contemporary information technology. Through lectures, readings, discussions, and short assignments, we will address contemporary challenges ranging from questions of inequality and waste in computing to the contests over intellectual property and privacy in a networked world. We will cover key areas of technology law and policy such as computing ethics; intellectual property; telecommunications and network policy; competition, antitrust, and freedom of expression; privacy and security; and AI ethics. We will also address new ethical questions and controversies that law and policy has yet to sort out. Through this course you’ll learn about the key frameworks, processes, and institutions that govern the contemporary world of information technology, along with key theories and methods from academic fields that shape and inform them (law, philosophy, economics, political science, communication, sociology, etc.). You will also learn core writing and analytic skills central to success in the worlds of social science, law, policy, and many other settings. But above all you’ll learn to engage critically and strategically with the worlds of information and technology around you, deciding what kind of information consumer, user, producer and citizen YOU want to be.

[Note: This course can also be used to satisfy the College of Engineering technical writing requirement.]

**LEARNING OBJECTIVES:**

By the end of Information Ethics, Law, and Policy, you will learn to:

* *Analyze* the social shaping of new computational forms and practices, including the influence of organizations, institutions, law, and culture on technology development and adoption
* *Understand* key ethical principles and foundations that govern individual and collective decision-making around the design and use of emerging information technologies
* *Reflect* on your own ethical positions and values, and offer reasoned arguments to support them (including in dialogue with the potentially differing positions of others)
* *Analyze* the key institutional, regulatory, and legal processes shaping current and future information policy in the U.S. (and to lesser extent internationally)
* *Identify* and *analyze* the key policy positions, interests, and strategies of major stakeholders in the information field
* *Read* and *critically assess* primary documents such as administrative reports, corporate policy statements, and Supreme Court judgments that have shaped information ethics, law, and policy in the U.S.
* *Write* concise, informed, and effective policy memos and case analyses appropriate to work in the ethics, law, and policy fields

These learning objectives will be met through a combination of lectures, readings, discussion, and individual and small group assignments, as described below.

**GRADING AND ASSIGNMENTS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Policy memos (**2** x **25** pts) **50%**

Section exercises and participation **25%**

Final exam **25%**

**Note that this revised grading scheme eliminates points initially allocated to in-class quizzes, iClicker exercises, and lecture participation.**

**POLICY MEMOS (50 pts):**

Students will be expected to complete **two** substantial policy analysis assignments (3-4 pages single-spaced), each tied to a key substantive topic of the course. These will follow the format of a policy brief or memo: a concise and tightly argued piece directed at a specific stakeholder or decision maker (head of an institution or agency, a federal judge, the chief privacy officer at Facebook, etc.) to recommend, defend, or convince them of a particular course of action. Concise and effective writing and analysis is a core skill set of the course, and we’ll spend some time practicing and developing it. See [Appendix #1: How to Write a Policy Memo](#bookmark=id.3as4poj) for instructions on the format of the submission.

**SECTION EXERCISES AND PARTICIPATION (25 pts):**

The Thursday/Friday discussion sections are mandatory and essential parts of the class, and will offer more in-depth discussions (often built around individual cases, questions, or key principles) of core course materials. Each section will be lead by a graduate TA (PhD or Law) with the support of an undergraduate TA (all successful veterans of past versions of the class). For some weeks, you may be asked to prepare brief notes to bring to section to share with your groupmates and/or the section instructor (for example, in cases where you are asked to read and summarize a key case, document or issue tied to the weekly theme of the course). Here, you should focus on the essential points or takeaways that someone who has *not* read the materials would want to know: for example, what is the law or policy in place (and why does it look the way it does)? What action did the court (or agency, or company) take and why? Are alternatives or counterarguments possible? And what are the wider implications, if any? You should come to section prepared to share and explain your case and response to your group and the wider community of your peers who may have arrived at different conclusions, or may not have read the case at all (during weeks where we divide up readings across 3-4 different groups). On weeks with assigned section exercises, you will be expected to submit these through the section page of the class Canvas site, according to the submission instructions shared with you by your section TA.

**Post-closure, section exercises and participation will occur online through a mix of real-time discussion and asynchronous activities. Please see your section syllabus from your TA for specifics, and discuss with your TA if you will need accommodations to fully participate in section requirements for any reason (including connectivity, time zone issues, health, etc.).**

**FINAL EXAM (25 pts):**

At the end of the course (during the course’s scheduled exam slot, as assigned by the registrar), we’ll hold a short-answer exam reviewing key materials covered during the course. The exam is designed to test your knowledge of key concepts, principles, terms, and cases, and will draw on lectures, assigned readings, section exercises, and discussions across the full breadth of the course. The key terms listed in the syllabus are a good place to start in preparing for this exam. Your answers should clearly explain what the term means, its wider significance or importance in the Info ELP world, and where helpful, provide an example that illustrates your understanding of the term in practice. More details on format and recommendations for preparation will be shared closer to the date of the exam.

**GENERAL NOTES ON PREPARATION, ATTENDANCE, and PARTICIPATION:**

Reading expectations in the class vary somewhat by week, but in general you can expect to read around 20-30 pages per class and section, and up to 60-80 pages per week. In some cases, these will be academic texts (book sections, short articles, etc.). In others, they will include popular news sources (tech and business journalism, online sources, etc.) and primary legal and policy documents (Supreme Court rulings, regulatory filings, corporate policies, etc.). In all cases, readings should be completed BEFORE arriving at class on the day they are listed in the syllabus (or you’ll find it hard to follow what’s going on in lecture or section and may find yourself unprepared for in-class discussions and exercises). We have worked hard to keep the reading load manageable (mostly by covering vast swathes of territory through lectures). We will also try to alert you to items you should be paying special attention beforehand (especially in cases of the longer, more academic-y or more arcane readings). The trade-off is that we require and fully expect you to complete and engage with what remains. *All assigned readings will be available via link or download from the class website* (i.e., there are no required books for purchase, though we are always happy to recommend additional sources for those looking to go deeper into particular areas). *Lecture PowerPoints will also be posted to the class website at the start of the lecture in question* (for those of you who prefer to take notes on slides as you go along). We will also post audio recordings of the lecture after the lecture.

**Pre-closure:** Because of the centrality of lectures and the interactive work we’ll be doing in both class and sections, REGULAR AND ACTIVE ATTENDANCE IS A CENTRAL AND MANDATORY PART OF THE CLASS. In general, students may miss 1-2 classes and up to 1 section over the course of the semester without any negative effect on your grade (though you are urged to check with your group for lecture or section notes and/or visit us in office hours to catch up on what you’ve missed). \*\* *If issues or situations arise that result in repeated or prolonged absences (medical situations, death in the family, etc.) please contact the class learning specialist, Hui Yang, and your section TA as soon as possible to let us know what’s going on and we can talk about strategies for managing the situation where possible*. \*\* Please also let Hui know of any university-approved accommodations you may need to support your work in the class. Beyond just being there, you should also come ready and willing to engage. Within the constraints of a large lecture course, this is intended as a hands-on and interactive class, and while we’ll spend some time in the Monday/Wednesday lectures reviewing core concepts and content, an important part of the energy and liveliness of the groups, class and sections will depend on YOU. As we’ll be doing a fair number of in-lecture and in-section activities, it’s also essential and only fair to your peers and your group that you come ready and prepared to engage.

**Post-closure: since in-person attendance is no longer possible, you should think about “active engagement” as a substitute. This means remaining up-to-date on watching recorded lectures and active, timely participation in the activities set up by your section TA. This said, we are willing to work with you to provide alternative accommodations for any circumstances that make participation more challenging. Please feel free to reach out to your TA, Hui, Steve, or Karen to discuss anything you would like to in this respect.**

**ACCESSING COURSE MATERIALS AND SUBMITTING ASSIGNMENTS:**

The Canvas site for this course is named: INFO1200/STS1201 Information Ethics, Law, and Policy. This is where you will find all class readings, learning activities, and assignments (by clicking on the *Modules* link in the left sidebar). This is also where you will find the iclicker/app information and iclicker/app registration guidelines. Most of your assignments for the class will be submitted as attachments over Canvas or in the discussion area. In addition, all course announcements will be sent to your Cornell email through Canvas, and this is where we will post periodic updates to the syllabus (which we’ll also announce by email and in class). It is important that you check the Canvas site and your email regularly so that you keep up with expected workload and don’t miss important information and announcements. \*\* *If you have any questions or problems around using or accessing Canvas, please contact the course active learning specialist, Hui Yang, at the email address and/or office hours listed under instructors above. \*\**

**LAPTOP AND SCREEN POLICIES:**

While this class doesn’t follow any particular laptop or phone policy (laptops banned, laptops in first or last rows, etc.) we want you to be mindful of the potential impact of laptops and phones on the quality of your learning experience and those around you. Used well, these are great resources for learning – for note taking, for collaborative group work, and for looking up class-relevant questions and items on the fly (which we encourage you to do). Used poorly, they are a distraction to you and those around you (and we suspect account for the small but significant number of fails we encounter on the final exam each year). If we see evidence of this happening in lecture or section, we may ask you to leave your laptop (or phone) in your bag or at home, and also revisit the general class laptop policy (but see important positive uses above). More generally, we’d encourage you to exercise common sense and respect for those around you (and do you really need to check that status update or watch that cat video now? *Really?*).

**A GENERAL NOTE ON GRADING and LATE POLICIES:**

In general, we will grade assignments according to the rubric below:

|  |  |
| --- | --- |
| F | (usually indicates did not complete) |
| D | (assignment is missing significant parts, seriously mistakes core ideas or concepts, demonstrates serious writing or presentation failures, or is otherwise deeply inadequate) |
| C | (assignment is substantially complete, but may miss or mistake important points; writing and argumentation may be unclear) |
| B | (assignment is complete and solid in all respects; covers major relevant points; writing and argumentation are sound; demonstrates understanding of core concepts) |
| A | (assignment is excellent in all respects; covers the material thoroughly and effectively; demonstrates significant mastery of core concepts; advances a clear and convincing line of argument) |

In cases where your work falls short of the mark, we’ll indicate main weak points and shortcomings in marginal notes or comments. In cases where common problems appear across multiple papers (i.e., several students are experiencing similar issues) we may also address these in general terms with the wider class or section. For each of the larger policy memos, we’ll also try to post 3-4 examples of student work that we regard as particularly strong or effective (and may ask you to share yours in this way at some point in the semester). We are also happy to meet during office hours or by appointment to talk about any difficulties you may be facing. If you feel you are consistently falling short of expectations and are looking for strategies to improve, please set up an appointment with your TA and/or the instructors. If you have concerns about a particular grade you are encouraged to first take the issue up with the original grader; if you remain unclear or uncertain about your grade after this meeting, you may ask your TA to send the paper to Karen and Steve for a second opinion. Wewill read the paper fresh and reserve the right to either raise or lower the originally assigned grade (and we have adjusted papers both ways in past, though in the majority of cases find that our assessment agrees with the original grader). We are also happy to provide additional feedback and strategies for improvement for future assignments.

***Late policies***: Assignments are due in class and/or online at the start of the class or section for which they are assigned – *your TA will share details of how they expect policy memos and shorter assignments to be submitted*. Assignments turned in after this time, except for excused medical or family emergencies, will be reduced at the rate of one half-letter per day (i.e. an ‘A’ paper becomes an ‘A-‘ after 24 hours, ‘B+’ after 48, etc.). This is partly for reasons of equity, and partly because the assignments often connect to in-class work on the day they’re due, and it’s important that you come ready to participate and contribute. *Students are allowed a one-time one-week extension for any of the major writing assignments (policy memos) without any penalty.* Please contact your section TA to request your one-week extension on any assignment before the deadline for the assignment. We will by default apply this policy to your first late writing assignment.

**COLLABORATION, ACADEMIC INTEGRITY, and TROUBLESHOOTING:**

We welcome and encourage forms of collaboration and mutual support in your group (reading or discussion groups, note pools, etc.), and we are fully committed to the principle of teaching, learning and research as activities that are collaborative at their core. We are also committed to the idea of the classroom, sections and your group as a place for differing opinions, and for (respectful) engagement with ideas, values and beliefs that might different from your own; this is especially important in a class built substantially around questions of ethics, values, and technology. Nevertheless, all work submitted in the form of assignments, position papers, or exams must still be your own, and relevant outside sources (including online ones) should be properly acknowledged, as outlined in the [Cornell University Code of Academic Integrity](https://cuinfo.cornell.edu/aic.cfm). If you have any questions around academic integrity issues, we encourage you to contact instructors directly and early to address them. If serious problems arise during the semester (medical or family issues; serious stress or well-being issues; falling seriously behind; or other circumstances that compromise your ability to succeed in the course and your wider program of studies) please let us know as soon as possible - we may be able to help.

**WRITING SUPPORT:**

This course involves a substantial writing component, principally in the form of policy memos as described above. We will do our best to help support the development of your writing as the semester goes on, including through feedback on submitted memos. Those concerned about or looking for additional help with writing are encouraged to consult the Cornell Writing Centers, as described below:

**The Cornell Writing Centers:** The Cornell Writing Centers provide support for individuals at any stage of the writing process. It is a free resource available to everyone on campus—faculty, staff, graduate and undergraduate students—for nearly any kind of writing project: applications, presentations, lab reports, essays, and more. Tutors (trained undergraduate and graduate students) serve as responsive listeners who read thoughtfully, and offer considerate, supportive, and challenging feedback. Please note that tutors can only work with small portions of text (no more than 5 pages) during a typical 30-minute session. They also have experience working with non-native English speakers. During the academic year, the Writing Centers are open Mondays-Thursdays, 3:30–5:30pm (Mann Library & Rockefeller Hall 178) and Sundays-Thursdays, 7:00–10:00pm (Olin library 403; Uris Library 108; Tatkon Center 3343). Writers can schedule appointments (at <http://knight.as.cornell.edu/wc>) or drop in at a convenient time.

**Post-closure: Cornell Writing Center is planning to move to digital support, though they have not yet announced details. Keep an eye on their website for this.**

**Syllabus Themes and their Distribution across Weeks
(initial indicates lead lecturer – S = Steve; K = Karen)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Themes across the weeks** | **Lectures** | **Sections** | **Dates** | **Policy Memos\*** |
| [Introduction to Information, Ethics, Law, and Policy](#bookmark=id.1pxezwc) (S & K) | 1 | 1 | Jan 22-24 |  |
| [Ethics and Social Shaping of IT](#bookmark=id.3znysh7) (S) | 2 | 1 | Jan 27-31 |  |
| **Theme #1: Computing Ethics** |
| (a) Labor, Consumption, and Waste (S) | 2 | 1 | Feb 3-7 |  |
| (b) Diversity, Inequality and Inclusion (K) | 2 | 1 | Feb 10-14 |  |
| **Theme #2: Intellectual Property** |
| [(a) Copyright](#bookmark=id.3dy6vkm) (S – Feb 17; K - Feb 19) | 2 | 1 | Feb 17-21 |  |
| *February Break (Feb 22-25, 2020)* |
| [(b) Patents](#bookmark=id.1t3h5sf) (K – Feb 26; S – Mar 2, 4) | 3 | 1 | Feb 26-Mar 4 | PM #1 due. |
| **Theme #3: Telecommunication and Network Policy** |
| [(a) Wired and Broadband](#bookmark=id.4d34og8) (S) | 2 | 1 | Mar 9-11 |  |
|  | 1 | 1 | Mar 11 |  |
| **Mar 13 – Apr 6: Cornell closure** |
| [(b) Spectrum](#bookmark=id.17dp8vu) and Net Neutrality (S) | 1 | 0 | Apr 6 |  |
| **Theme #4: Competition, Antitrust, and Freedom of Expression** |
| [(a) Antitrust and Monopoly](#bookmark=id.1ksv4uv) (S) | 1 | 1 | Apr 8 |  |
| (b) Regulating Platform Speech (Tarleton Gillespie “guest lecture”) | 1 | 1 | Apr 13 |  |
| [(c)](#bookmark=id.35nkun2) Speech, Content, & Harassment (K) | 2 | Apr 15-20  |  |
| **Theme #5: Privacy and Security** |
| [(a) Privacy and Surveillance](#bookmark=id.44sinio) (K) | 2 | 1 | Apr 22-27 |  |
| [(b)](#bookmark=id.3j2qqm3) The Encryption Debate (K) | 1 | 1 | Apr 29 |  |
| **Theme #6: AI Ethics** |
| Prediction and Decision-Making (K) | 2 | 1 | May 4-6 | PM #2 due May 5 |
| [Wrap-up and Review](#bookmark=id.2xcytpi) (S & K) | 1 | 0 | May 11 |  |
| \* See [Appendix #1: How to Write a Policy Memo](#bookmark=id.3as4poj) for instructions on the format of the submission |

**LECTURE, SECTION, and READING SCHEDULE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Weds, Jan 22: Course Introduction and Overview (Steve and Karen)**

*Course and teaching team introductions. No assigned readings.*

**Thurs/Fri, Jan 23/24: sections**
Introductions, discussion, and small group work. No assignment due.

**Mon, Jan 27:** **Ethics and Social Shaping of IT (Steve)**

*Required readings:*

* Donald MacKenzie and Judy Wajcman. 1985. “Introductory Essay and General Issues.” In *The Social Shaping of Technology*, edited by Donald MacKenzie and Judy Wajcman, 2–25. Buckingham: Open University Press.
* Bynum, Terrell Ward. 2008. “Milestones in the History of Information and Computer Ethics.” In *The Handbook of Information and Computer Ethics*, edited by Kenneth Einar Himma and Herman T. Tavani, 20–38. New Jersey: Wiley.

**Wed, Jan 29: Ethics and Social Shaping of IT (Steve)**

*Required readings:*

* Philip Brey, “Values in Technology and Disclosive Computer Ethics,” In *The Handbook of Information and Computer Ethics*, edited by Kenneth Einar Himma and Herman T. Tavani, 41–58. New Jersey: Wiley.
* Star, Susan Leigh, and Geoffrey C Bowker. 2007. “Enacting Silence: Residual Categories as a Challenge for Ethics, Information Systems, and Communication.” *Ethics and Information Technology* 9 (4): 273–80.
* Manuel Velasquez, Claire Andre, Thomas Shanks, and Michael J. Meyer, “Thinking Ethically”: <https://www.scu.edu/ethics/ethics-resources/ethical-decision-making/thinking-ethically/>

**Thu/Fri, Jan 30/31: sections**

**Mon, Feb 3: Computing Ethics: Labor, Consumption, and Waste (Steve)**

*Required readings:*

* Crawford, Kate, and Vladan Joler. 2018. “Anatomy of an AI System: The Amazon Echo as An Anatomical Map of Human Labor, Data and Planetary Resources.” *AI Now Institute and Share Lab.* 2018. <https://anatomyof.ai/>.
* Frankel, Todd. 2016. “The Cobalt Pipeline: Tracing the Path from Deadly Hand-Dug Mines in Congo to Consumers Phones and Laptops.” *Washington Post*, September 30, 2016. <https://www.washingtonpost.com/graphics/business/batteries/congo-cobalt-mining-for-lithium-ion-battery/>.
* Finley, Klint. 2016. “The Cloud Needs to Get a Whole Lot Greener in 2017.” *Wired*, December 2016. <https://www.wired.com/2016/12/2017-cloud-needs-get-whole-lot-greener/>.
* Kirkpatrick, Nick. 2015. “Making a Living in the Toxic World of Discarded Electronics.” *Washington Post*, April 15, 2015. <https://www.washingtonpost.com/news/in-sight/wp/2015/04/15/the-children-who-make-a-living-in-the-toxic-world-of-discarded-electronics/>.
* Wiens, Kyle. 2017. “You Bought That Device, and Dammit, You Should Be Able to Fix It.” *Wired*, March 2017. <https://www.wired.com/2017/03/right-to-repair-laws/>.

Recommended (read the phone you use!): Apple or Samsung environmental policies:

<https://www.apple.com/environment/pdf/Apple_Environmental_Responsibility_Report_2019.pdf>

<https://images.samsung.com/is/content/samsung/p5/global/ir/docs/sustainability_report_2019_en.pdf>

**Wed, Feb 5: Computing Ethics: Labor, Consumption, and Waste (Steve)**

*Required readings:*

* Irani, Lilly C, and M Six Silberman. 2013. “Turkopticon: Interrupting Worker Invisibility in Amazon Mechanical Turk.” In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 611–20. CHI ’13. New York, NY, USA: ACM. <https://doi.org/10.1145/2470654.2470742>.
* Motherboard. 2018. “Inside the Beach House Connecting the World’s Internet.” *YouTube*. 2018. <https://www.youtube.com/watch?v=iMAThVcqzuk>.

**Thu/Fri, Feb 6/7: sections**

**Mon, Feb 10: Computing Ethics: Diversity, Inequality, and Inclusion (Karen)**

*Required readings:*

* Abbate, Janet. 2003. “Women and Gender in the History of Computing.” *IEEE Annals of the History of Computing* 25 (4): 4–8. <https://doi.org/10.1109/MAHC.2003.1253885>.
* Mundy, Liza. 2017. “Why Is Silicon Valley So Awful to Women?” *The Atlantic*, April 2017. <https://www.theatlantic.com/magazine/archive/2017/04/why-is-silicon-valley-so-awful-to-women/517788/>.
* Buolamwini, Joy, and Timnit Gebru. “Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification.” Proc. of Machine Learning Research (2018), http://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf.
* Google and Gallup. 2016. “Diversity Gaps in Computer Science: Exploring the Underrepresentation of Girls, Blacks and Hispanics.” <http://goo.gl/PG34aH>. [Focus on the ‘Executive Summary’ and ‘Conclusion’ of the report and you may skim the sections in between.]

**Wed, Feb 12: Computing Ethics: Diversity, Inequality, and Inclusion (Karen)**

*Required readings:*

* Eubanks, Virginia. 2018. “The Digital Poorhouse.” *Harper’s Magazine*, January 2018. <https://harpers.org/archive/2018/01/the-digital-poorhouse/>.
* Rotman, David. 2014. “Technology and Inequality.” *MIT Technology Review*, October 2014. <https://www.technologyreview.com/s/531726/technology-and-inequality/>.
* Bessen, James. 2016. “Computers Don’t Kill Jobs but Do Increase Inequality.” *Harvard Business Review*, March 2016. <https://hbr.org/2016/03/computers-dont-kill-jobs-but-do-increase-inequality>.

*Optional:*

* Damore, James. 2017. “Google’s Ideological Echo Chamber: How Bias Clouds Our Thinking about Diversity and Inclusion.” Internal Memo @ Google. 2017. <https://assets.documentcloud.org/documents/3914586/Googles-Ideological-Echo-Chamber.pdf>.
* Molteni, Megan, and Adam Rogers. 2017. “The Actual Science of James Damore’s Google Memo.” *Wired*, August 2017. <https://www.wired.com/story/the-pernicious-science-of-james-damores-google-memo/>.

**Thu/Fri, Feb 13/14: sections**

**Mon, Feb 17: Intellectual Property: Copyright (Steve)**

*Required readings:*

* Lehman, Jeffrey, and Shirelle Phelps, eds. 2005. “Copyright.” In *West’s Encyclopedia of American Law, Volume 3*, 2nd ed., 190–200. Detroit and London: Thomson Gale.
* Litman, Jessica. 2006. “Introduction” and “Copyright Basics.” In *Digital Copyright*,11-34. Amherst: Prometheus Books.

**Wed, Feb 19: Intellectual Property: Copyright (Karen)**

*Required readings:*

* Aufderheide, Patricia, and Peter Jaszi. 2018. “How to Fair Use.” In *Reclaiming Fair Use: How to Put Balance Back in Copyright*, 2nd Ed., 157–77. Chicago: University of Chicago Press.
* Radin, Margaret Jane. 2004. “Regulation by Contract, Regulation by Machine.” *Journal of Institutional and Theoretical Economics* 160: 1-15.

**Thu/Fri, Feb 20/21: sections**

**[Mon, Feb 24: February break]**

**Wed, Feb 26: Intellectual Property: Patents (Karen)**

*Required readings:*

* Burk, Dan L, and Mark A Lemley. 2009. *The Patent Crisis and How the Courts Can Solve It*, 7-33. Chicago: University of Chicago Press.
* Levy, Steven. 2012. “The Patent Problem.” *Wired*, November 2012. <https://www.wired.com/2012/11/ff-steven-levy-the-patent-problem/>.

**Thu/Fri, Feb 27/28: sections**

**Mon, Mar 2: Intellectual Property: Patents (Steve)**

*Required readings:*

* Gil, Elizabeth M. 2017. “Samsung v. Apple: Taking a Bite Out of the Design Patent ‘Article of Manufacture.’” *U. Miami Bus. L. Rev.* 25 (3): 67–88. <https://repository.law.miami.edu/umblr/vol25/iss3/5/>.

**Wed, Mar 4: Intellectual Property Wrap-up and Recap (Steve)**

*Recommended readings (please review two of the below!):*

* Electronic Frontier Foundation, “Legislative Solutions for Patent Reform”:<https://www.eff.org/issues/legislative-solutions-patent-reform>
* United for Patent Reform:
<https://www.unitedforpatentreform.com/>
* Creative Commons, “Copyright Reform”:
<https://creativecommons.org/about/program-areas/policy-advocacy-copyright-reform/reform/>
* Jessica Litman and Pamela Samuelson, “The Copyright Principles Project: Directions for Reform” (University of Michigan Law School, 2010):
<https://repository.law.umich.edu/cgi/viewcontent.cgi?article=2380&context=articles>

**Thu/Fri, Mar 5/6: sections**

**Mon, Mar 9: Telecommunications and Network Policy (Steve)**

*Required readings:*

* Wu, Tim. 2009. “A Brief History of American Telecommunications Regulation.” In *Oxford International Encyclopedia of Legal History*, edited by Stanley N. Katz. Oxford: Oxford University Press. <https://scholarship.law.columbia.edu/faculty_scholarship/1461/>.

**Wed, Mar 11: Telecommunications and Network Policy (Steve)**

*Required readings:*

* Chen, Jim. 1997. “The Legal Process and Political Economy of Telecommunications Reform.” *Columbia Law Review* 97 (4): 835–73. <https://www.jstor.org/stable/1123309>.

 **-- Cornell closure and move to virtual instruction --**

**Mon, Apr 6: Spectrum and Network Neutrality (Steve)**

* Smith, Ernie. 2017. “A Short History of Wireless Spectrum, the Most Complicated Puzzle You’ve Ever Seen.” *Motherboard*. <https://motherboard.vice.com/en_us/article/mbjpjb/a-short-history-of-wireless-spectrum-the-most-complicated-puzzle-youve-ever-seen>.
* Brian Barrett, “Fight: The WIRED Guide to Network Neutrality,” Wired Magazine, Dec 14, 2017: <https://www.wired.com/story/net-neutrality-fight-wired-guide/>
* Gilroy, Angele A. 2019. “The Net Neutrality Debate: Access to Broadband Networks.” *Congressional Research Service*, Washington, DC. <https://crsreports.congress.gov/product/pdf/R/R40616>. [You may skim/skip the section on Congressional Activity, pp. 16-27]

*Optional (but fun):*

* Oliver, John. 2014. “Net Neutrality: Last Week Tonight with John Oliver (HBO).” *YouTube.* <https://www.youtube.com/watch?v=fpbOEoRrHyU>.
* Oliver, John. 2017. “Net Neutrality II: Last Week Tonight with John Oliver (HBO).” *YouTube*. [https://www.youtube.com/watch?v=92vuuZt7wak](https://www.youtube.com/watch?v=92vuuZt7wak&t=1s).

**Wed, Apr 8: Antitrust and Monopoly in the Information Industries (Steve)**

* Kwoka, John, and Lawrence White. 2013. “Introduction,” and “The Economic and Legal Context.” In *The Antitrust Revolution: Economics, Competition, and Policy*, 6th ed., 1-33. Oxford: Oxford University Press.
* Martinez, Antonio Garcia. 2018. “What Microsoft’s Antitrust Case Teaches Us About Silicon Valley.” *Wired*, February 11, 2018. <https://www.wired.com/story/what-microsofts-antitrust-case-teaches-us-about-silicon-valley/>.
* Podcast: Planet Money, “Antitrust 3: Big Tech” (the first two podcasts in this antitrust series are also recommended): <https://www.npr.org/sections/money/2019/02/22/697170790/antitrust-3-big-tech>
* Adam Tanner, “Different Customers, Different Prices, thanks to Big Data”: [https://www.forbes.com/sites/adamtanner/2014/03/26/different-customers-different-prices-thanks-to-big-data/#48ac572b5730](https://www.forbes.com/sites/adamtanner/2014/03/26/different-customers-different-prices-thanks-to-big-data/%2348ac572b5730)

**Thu/Fri, Apr 9/10: sections**

**Mon, Apr 13: Regulating Platform Speech (Tarleton Gillespie (Microsoft Research)) Tarleton was planning on giving a guest lecture in our course; in light of campus closure, instead please view this video of a lecture he gave on the same topic in October 2018:**

* <https://www.youtube.com/watch?v=pKh9-g6WfR8>

*Required readings:*

* Lepore, Jill. 2018. “The Hacking of America.” *New York Times*, September 14, 2018. <https://www.nytimes.com/2018/09/14/sunday-review/politics-disruption-media-technology.html>.
* Tarleton Gillespie, “How Social Media Set the Limits of What We Can Say Online,” *Wired Magazine*, June 2018:

[https://www.wired.com/story/how-social-networks-set-the-limits-of-what-we-can-say-online/](https://www.wired.com/story/how-social-networks-set-the-limits-of-what-we-can-say-online/?mbid=email_onsiteshare)

**Wed, Apr 15: Speech, Content, and Harassment (Karen)**

*Required readings:*

* Marantz, Andrew. “Free Speech is Killing Us. *New York Times* (Oct. 4, 2019), <https://www.nytimes.com/2019/10/04/opinion/sunday/free-speech-social-media-violence.html>
* Benkelman, Susan. “The Law that Made the Internet What it is Today.” *Washington Post* (April 26, 2019), <https://www.washingtonpost.com/outlook/the-law-that-made-the-internet-what-it-is-today/2019/04/26/aa637f9c-57c5-11e9-9136-f8e636f1f6df_story.html>
* Keller, Daphne. “The Stubborn, Misguided Myth that Internet Platforms Must Be ‘Netural.’” *Washington Post* (July 29, 2019), <https://www.washingtonpost.com/outlook/the-law-that-made-the-internet-what-it-is-today/2019/04/26/aa637f9c-57c5-11e9-9136-f8e636f1f6df_story.html>

**Thu/Fri, Apr 16/17: sections**

**Mon, Apr 20: Speech, Content, and Harassment (Karen)**

*Required readings:*

* Wired Magazine Special Issue. 2018. “Free Speech, Tech Turmoil, and the New Censorship.” *Wired*, February 2018. <https://www.wired.com/2018/01/free-speech-issue/>.
* Klonick, Kate. “The New Governors: The People, Rules, and Processes Governing Online Speech.” 131 Harvard Law Review 1598 (2018), <https://harvardlawreview.org/2018/04/the-new-governors-the-people-rules-and-processes-governing-online-speech/>

**Wed, Apr 22: Privacy and Surveillance (Karen)**

*Required readings:*

* Warren, Samuel D., and Louis D. Brandeis. 1890. “The Right to Privacy.” Edited version In Solove et al, *Privacy, Information, and Technology*, pp. 13-23.
* Solove, Daniel J. Nothing to Hide: The False Tradeoff Between Privacy and Security. 2011. Chapters 2, 3, and 5.

**Thu/Fri, Apr 23/24: sections**

**Mon, Apr 27: Privacy and Surveillance (Karen)**

*Required readings:*

* Kerr, Orin. “Does Installing a GPS Device on a Car Constitute a Fourth Amendment Search or Seizure?” SCOTUSblog, Oct. 27, 2011, <https://www.scotusblog.com/2011/10/does-installing-a-gps-device-on-a-car-constitute-a-fourth-amendment-search-or-seizure/>
* Bankston, Kevin S. and Ashkan Soltani. “Tiny Constables and the Cost of Surveillance: Making Cents Out of *United States v. Jones*,” *Yale Law Journal Online* 123 (2014): 335-357. <https://www.yalelawjournal.org/pdf/1231_jjd1qz1e.pdf>

**Wed, Apr 29: The Encryption Debate (Karen)**

*Required readings:*

* Harold Abelson et al. “Keys Under Doormats: Mandating Insecurity By Requiring Government Access to All Data and Communications.” MIT Computer Science and Artificial Intelligence Laboratory Technical Report. July 6, 2015. <https://dspace.mit.edu/bitstream/handle/1721.1/97690/MIT-CSAIL-TR-2015-026.pdf>
* Cyril, Malkia. “Black Americans and Encryption: The Stakes are higher than Apple v. FBI.” The Guardian. Mar. 21, 2016. <https://www.theguardian.com/technology/2016/mar/21/apple-fbi-black-americans-encryption-debate>
* Baker, Jim. “Rethinking Encryption.” Lawfare blog. Oct. 22, 2019. <https://www.lawfareblog.com/rethinking-encryption>

**Thu/Fri, Apr 30/May 1: sections**

**Mon, May 4: AI Ethics: Prediction and Decision-Making (Karen)**

*Required reading:*

* Nijhuis, Michelle. 2017. “How to Call B.S. on Big Data: A Practical Guide.” *The New Yorker*, June 2017. <https://www.newyorker.com/tech/annals-of-technology/how-to-call-bullshit-on-big-data-a-practical-guide>.
* Shaw, Jonathan. 2019. “Artificial Intelligence and Ethics: Ethics and the Dawn of Decision-Making Machines.” *Harvard Magazine*, 2019. <https://harvardmagazine.com/2019/01/artificial-intelligence-limitations>.
* Calo, Ryan. “Artificial Intelligence Policy: A Primer and Roadmap.” U.C. Davis Law Review 51: 399-435 (2017). <https://lawreview.law.ucdavis.edu/issues/51/2/Symposium/51-2_Calo.pdf>

**\*\*\* Policy Memo #2 due Tuesday, May 5 \*\*\***

**Wed, May 6: AI Ethics: Prediction and Decision-Making (Karen)**

*Required reading:*

* Lerman, Jonas. “Big Data and its Exclusions.” Stanford Law Review Online 66: 55-63 (2013). <https://www.stanfordlawreview.org/online/privacy-and-big-data-big-data-and-its-exclusions/>
* [watch; 9 minute video] Buolamwini, Joy. “How I’m Fighting Bias in Algorithms.” Ted Talk. https://www.ted.com/talks/joy\_buolamwini\_how\_i\_m\_fighting\_bias\_in\_algorithms/

**Thu/Fri, May 7/8: sections**

**Mon, May 11: Wrap-up and Review (Steve and Karen)**

*No assigned readings.*

**APPENDIX #1: HOW TO WRITE A POLICY MEMO**

(updated January 2020)

**I. WHO READS MEMOS?**

The typical recipient of a policy memo a) is extremely busy, b) is less knowledgeable about the subject

at hand than the memo’s author, and c) is responsible for making important decisions on the basis of memos like the one you are about to write. All the suggestions below should be considered in this light.

**II. TITLING:** Please use the following format:

To: … [name of stakeholder you’re addressing: for example, “Ajit Pai, Chair of the Federal Communications Commission”]

From: … [your name]

Re: … [a clear, simple and descriptive title: for example “Recommendations for Copyright Reform”

Date: … [date of memo submission]

Section: … [give section # and TA name – for example, “203 (Alex Henning)”

**II. INTRODUCTION FORMAT**

Begin your memo with a short summary introduction. This introduction should tell the reader:

*1. The memo topic and what ground or issues it covers.*

*2. Key points, recommendations or conclusions that you will be arriving at in your analysis.*

*3. A roadmap or outline of the memo’s structure. For example, “Section 1 reviews key background on current structure and past reform efforts in U.S. Copyright policy. Section 2 outlines three key limits and problems in current copyright policy: [identify these – ‘A, B, and C’). Section 3 discusses key recommendations for action by the courts and Congress that could help address these challenges.*

Recall that in real-world settings people may never read more than the introduction or executive summary. Those who do will find it much easier to understand your memo after reading it. Policy memos are not mystery novels – it’s okay to give away the ending!

**III. WRITING**

Your memo should be clear, concise, well structured and easy to follow. It should also be carefully proofread and written in a professional manner (no typos; clear grammar; no colloquialisms; etc.). Five guidelines for good formatting should be kept in mind.

1. Stay on point and keep it short. The typical memo should make a single point or a handful of related points. Drop any argument that does not support your main point(s). Concise memos earn wider readership and higher praise than long memos no one ever finishes. You should be direct, choose your words carefully and edit rigorously. There should be no extraneous words in your memo.
2. Organize your memo around meaningful sections. Repeat the memo’s most salient points and conclusions in the section headers. These will help guide the reader quickly through your memo.
Examples: “Arguments Supporting Network Neutrality”; “Key Recommendations for Patent Reform”; etc. Each paragraph should start with a topic sentence that summarizes its main point. A reader should be able to follow the flow of your memo just by reading the first sentence of each paragraph.
Examples:
3. Use formatting to enhance the informational content of your memo. One way to improve ease of readership may be through the use of tables, figures, and bullet points. The goal in all cases is to say more with less. Make sure when you use these that they actually enhance understanding and don’t just look cool. Use narrative or bulleted lists to establish structure and convey simple ideas (for example, “Proponents of copyright reform advance three basic arguments: first, …; second, …; third.) Avoid long lists (which can sometimes become confusing and lose the flow of argument). Tables and figures should allow the reader to understand more while reading fewer words – if you have to spend a page explaining a figure you probably should drop it. If bullet lists or tables become too short or cryptic however, they may not help your cause.
4. Write for an audience that is interested and knowledgeable but not expert. Don’t write a memo that only you and three other experts can understand. Avoid excessive jargon and bureaucratese, except where it’s essential to your point, and explain any technical terms that you bring in. Make your memo self-contained and comprehensive enough (while keeping it short!) to enable others to understand the basis for your conclusions.
5. Provide citations to your sources of information within the text of the memo (Litman 1999) and include a list of references or works cited at the conclusion of the memo. Obey whatever citation formatting norms are in place where you work. [In this class, I am okay with any standard referencing format, as long as: a) it is used consistently throughout the memo; and b) all sources are clearly and comprehensively identified (e.g., if an online news story, not just the URL, but author, title, date, URL, and date accessed).

**IV. ANALYSIS & ARGUMENTATION**

The fundamental purpose of a policy memo is to help people make decisions. Your memo should provide

exactly as much background and description as is required to allow your reader to understand your analysis and no more. Even if you are asked to provide background or an overview of an issue, event, person, or group, your goal is to analyze, not merely describe. When necessary, descriptions of historical periods should aim to illustrate the key themes relevant to current policy debates. Likewise, when you are making a case for a policy option, your memo must persuade through logical argument, not simple recitation of facts and assertions. In cases where there are obvious important contrary positions, it is important that alternative positions are adequately researched and represented, regardless of what your eventual position and recommendations will be – no points for straw men! Your work should also be supported by appropriate external references and support – this is not just your opinion but draws on reasoned arguments and evidence that support your analysis and recommendations for action.

**VII. CONCLUSION FORMAT**

Your conclusion should reemphasize your main points and recommendations. How exactly you do this will depend on the purpose of your memo. Generally speaking, however, the conclusion is the place to explore the implications of your analysis and recommendations. What arguments or policies do they call into question, which do they reinforce? What additional analysis seems required? What other key decisions must be made in light of your work?

**VII. EDITING AND REVISING**

Ask a friend or colleague to read your memo. It can be especially helpful to have someone from outside

your field read your work. Helpful questions to ask yourself before submitting your memo include:

* Does my introduction provide a clear summary of the memo?
* Is my main point(s) clear?
* Is the organization clear and are all sections and paragraphs presented in a logical manner?
	+ Can my reader easily follow the memo?
* Can someone outside the immediate topic area understand my writing?

**VIII. BEAUTY TIPS**

Your memo should dress for success. Check your work for spelling and grammar errors. Legible font types and sizes (3-4 pages, single-spaced, 12-pt font!), reasonable margins (1”), and high printing quality (if submitting in paper form) are essential.

Steven J. Jackson, Cornell University
(adapted from “How To Write a Policy Memo”, A. Trevor Thrall

University of Michigan – Dearborn, 2006)