

COMM 3190: Data & Society

Cornell University

Department of Communication

Instructor: danah boyd

Course Description

Data cannot speak for themselves, but that doesn't stop ventriloquists from turning data into puppets. As the economist Ronald Coase once noted, "if you torture the data long enough, it will confess to anything." Data are often presumed to be neutral, objective, and able to speak for themselves. Yet as Geof Bowker has noted, "Raw data is both an oxymoron and a bad idea... data should be cooked with care." But even when data are cooked, it is often difficult to see what they are made from, let alone how they flow into systems in ways that have significant impacts on people, communities, organizations, and the environment.

The purpose of this class is to learn to "see" the work that data does in our modern world. Data and society are fundamentally entangled. In this class, we will pull on the different strands of this entanglement to better understand the role that data plays across a range of distinct contexts. This is a survey course, intended to expose students to a broad array of issues. We will explore the role that data plays in domains as varied as representative democracy, search engines, labor, and genetic sense-making. We will examine how economic and political interests shape what data exist and how those data are used. We will also explore the communicative role that data plays in politics, decision-making, and ideological maneuvering.

By the end of this course, you should be able to:

1. Trace the provenance and politics of data sets.
2. Describe how social, cultural, technical, and economic dimensions of data are entangled.
3. Articulate and define different theories that can be used to analyze data-driven systems.

Through the exercises and assignments in this class, you will also develop the capacity to:

1. Read, summarize, and communicate different types of research and analysis.
2. Construct and communicate a persuasive argument about the role that data plays in society.
3. Develop the ability to see intellectual connections and build on the knowledge and insights of your peers.

More broadly, you can expect to come away from this class more informed about the logics that inform our algorithmic and AI-oriented society. You can also expect to be better prepared to responsibly engage with data professionally and critically respond to societal debates about our data-driven future.

Attendance:

This is a lecture class with in-class participatory activities designed to support your learning. For this reason, attendance is compulsory. Please be in your seats by 11:40AM so that class can start on time for the benefit of all. Arriving late or leaving class early disrupts your peers' learning

opportunities. You may miss class, be late, or leave early for 4 classes without penalty. Barring extraordinary circumstances, every class more than four that you miss or are late or leave early, you will lose 1% of your grade.

There is one exception: September 29. Because we will have an in-class poster expo connected to Assignment 1, absences on this date will not be tolerated. Please review the instructions for Assignment 1 and contact us immediately if this is an issue.

If you know in advance that you will be absent for, late to, or leaving early from a class, please drop us an email as soon as possible (even if that is same-day). This will help us with in-class activity planning.

In-Class Quizzes:

There will be five brief in-class comprehension quizzes throughout the semester. These will be based on the weekly readings. Your lowest score will automatically be dropped. If you miss two due to excused absences, your grade will be an average of the three that you took. If you miss more than two, you will be required to attend a makeup exam at the end of the semester.

If you inform us of your upcoming absence at least two hours before class is to start, you are eligible for a “make up” quiz:

- *Contact us within 48 hours of the missed class to activate this option.*
- *Makeup will happen at the following office hours (or an arranged time).*
- *Makeup may be oral or written - and will be different than the one in class.*

Accommodations:

If you are a student with a disability or who qualifies for academic accommodations, please contact Professor boyd as soon as possible to make arrangements.

We are happy to work with you to support academic accommodations. We have provided basic information about the assignments and expectations in this document. Please make sure that you scan the expectations now. Should you need any accommodations for the readings, assignments, or activities in this class, please contact us by September 3.

Should a significant change occur over the course of the semester, please contact us as soon as possible. We will not consider alternative accommodations after an assignment has been handed out unless we hear directly from Student Disability Services.

Statement of Inclusivity and Respect

Each student in this course is expected to contribute to an inclusive and respectful class environment. Students of all backgrounds including gender, sexual orientation, race, ethnicity, caste, nationality, and religion are to be treated fairly and with honesty, integrity, and respect. Civil discourse, reasoned thought, sustained discussion, and constructive engagement without degrading, abusing, harassing, or silencing others is required of all students in this class.

In-Class Device Policy

Technology can support your educational development; it can also be a distraction, both to you and others in the classroom. It is your responsibility to avoid using technology in ways that rupture the academic purpose for which we gather. You are responsible for your behavior and choices – and the impact that they have on those around you. If your use of technology distracts your peers or results in your disengagement from the classroom, you will be treated as being absent from class.

Generative AI Policy

Generative AI is a powerful tool that can enhance your creativity, but it also comes with trade-offs. You may use Generative AI for your class work, but you *must* be transparent about your use (or it will be considered plagiarism). In each assignment for which you use Generative AI, you must add a GenAI Statement at the end of your work. For research, you should document which tools you used and how. If you use GenAI either to brainstorm or to produce/edit text for you, you should include information about the prompts that you used.

As part of your Generative AI statement, you should articulate why you chose to use GenAI, how using GenAI benefited your work on the project, how you ensured the quality of your work, and how you grappled with the ethical and environmental trade-offs of using GenAI.

Reflexivity and transparency of practice is of utmost importance. Failure to be honest and straightforward about your use of GenAI – even for doing research for the assignment – will be treated as plagiarism.

Individual assignments will provide more information about appropriate GenerativeAI use for that assignment. Please reach out to us if you have any questions to ensure that your use is above-board.

Academic Integrity

Each student in this course is expected to hold each other to the highest standards of academic integrity and abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work. For collaborative projects, students will be asked to identify who contributed what to the effort. If you have any doubts about what constitutes a violation of the Code of Academic Integrity, or any other issue related to academic integrity, please ask us.

Students agree that by taking this course, all required papers may be subject to submission for textual similarity review to Turnitin.com or a similar service for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

Any student in this class suspected of plagiarism or cheating on tests or assignments will have a primary hearing. If found guilty, the student will receive a failing grade on the assignment in question and a reduction in the overall course grade, and the results of the hearing will be reported to the CALS Academic Integrity Board. The Department of Communication's policy is based on university-wide policy and procedures. Visit the University Academic Integrity website for further information.

Although this class does not prohibit the use of Generative AI, you are still responsible for every claim and citation in your work, whether you use advanced tools or not. For example, you are expected to fully read any reference/citation you include in your work. A single hallucinated citation from Generative AI will result in a zero for the assignment. You should also be prepared to answer questions about or turn over your notes about any reference you include in your materials. Academic integrity means that you are actually reading and thinking about the texts, not just citing texts based on their title.

Recording and Sharing Policy

All materials of this course are copyrighted and it is prohibited to circulate or sell to commercial vendors the course materials, including syllabus, exams, lecture notes, images, presentations, and student papers. Such unauthorized behavior constitutes academic misconduct. Video and/or audio recording of class lectures and review sessions without my permission in advance is prohibited. If you have an accommodation letter from Student Disability Services or if you are interested in recording for your personal use as a study aid, please discuss this with me (via email or office hours) before you record anything.

Assignments and their Grade Values:

Attendance: 10% (10pts)
In-Class Contributions: 10% (10pts)
In-Class Quizzes: 10% (4 x 2.5pts)
Assignment #1: 20% (20pts)
Assignment #2: 20% (20pts)
Explainer Comments: 10% (10pts)
Assignment #3: 20% (20pts)

Grading Policies

You can expect to receive a grade, along with an explanation for why points were deducted and brief feedback for each assignment. In general, we will grade assignments towards the following rubric:

- F: failure to complete the assignment
- D: assignment is missing significant parts, shows lack of core ideas/concepts, is difficult to read, or is otherwise deeply flawed
- 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

If you have a concern about a particular grade, please start by sending an email to both the professor and the TA with a clear articulation of why, in light of this rubric and the articulation of deducted points, you feel as though the grade is inaccurate.

If you choose to work in teams, you will all receive the same grade unless you contact us in advance.

Grading Scale:

A+ = 98-100	B+ = 87-89.9 ^[L] _[SEP]	C+ = 77-79.9 ^[L] _[SEP]	D+ = 67-69.9 ^[L] _[SEP]	F = <60
A = 94-97.9 ^[L] _[SEP]	B = 84-86.9 ^[L] _[SEP]	C = 74-76.9	D = 64-66.9	
A- = 90-93.9 ^[L] _[SEP]	B- = 80-83.9	C- = 70-73.9	D- = 60-63.9 ^[P] _[SEP]	

Grades are truncated to the first decimal and we do not round. Thus, 86.99 becomes 86.9, which is a B.

Late Assignment Policies:

Each assignment will have its own late policy. In general, for every day that an assignment is late, you will receive a deduction of 1 full point (e.g., 5% of the grade of a 20-point assignment). In general, if a last-minute issue related to the deadline arises, you must contact us at least 72 hours *in advance* of the deadline to get permission for an extension. After that, a doctor's note will be necessary.

Please note that extensions will be rarely given. Two of the assignments are scheduled to connect to additional activities (a poster session and response comments). As such, being late has ripple effects. Since you have the assignments at the beginning of the semester, I encourage you to plan accordingly.

If you are unable to participate in class on September 29, you must contact us by September 3 at the latest for an alternative assignment. The consequences for missing this class are substantial. If you are sick, you will need a doctor's note – and we will work with you for an alternative assignment.

Opportunities for Extra Credit:

There will be occasional opportunities for extra credit throughout the semester, linked to attending external talks or doing extra project work. The maximum semester-length extra credit you can obtain through these opportunities is 8%. There will be no last-minute opportunities for extra credit offered in December.

Assignment #1: The Story of a Data Set (20%) [Poster due: September 29, No Extensions Possible.]

For this assignment, you will work in pairs to create a “poster” and a stump speech to tell the “story” of a specific dataset. Since data cannot speak, your goal is to speak for them. You will be asked to be creative in choosing how to tell the story of the data. What makes this data set interesting, important, or impactful? If there’s a controversy around these data, highlight this. If these data *could* talk, what would they say?

Examples you might consider (but are by no means limited to) are:

- Advertising or marketing data sets (e.g., what data brokers sell)
- Agricultural data (e.g., water data, soil data)
- Economic data (e.g., GDP, IRS data, unemployment data)
- Education data (e.g., test records, funding allocation)
- Human rights data (e.g., data used by the UN, data for tracking journalism freedom)
- Public health data (e.g., adoption rates of MMR vaccines, opioid epidemic data)
- Public safety data (e.g., criminal justice data, policing data)
- Scientific data (e.g., astronomy, chemistry data sets)

You will contribute your poster and stump speech to a Poster Expo on September 29, wherein you will share your work with your peers. The details of this assignment will be shared with you on the first day of class since you will be asked to select a data set by September 3.

The purpose of this assignment is to:

1. Show your understanding of the various facets of the data set you chose.
2. Demonstrate your ability to effectively and creatively communicate the “story” of a data set.
3. Develop your ability to briefly communicate a message in a manner that inspires your peers. (Never forget: teaching is a form of learning!)

Assignment #2: Explainer (20%) [Due November 3]

At the beginning of the semester, you will be given a selection of possible book-length readings to choose from. You will submit your top five choices to me by August 29 so that I can work with the Cornell Store to help you obtain your book.

For this assignment, you will be asked to select a long-form text that grapples with issues related to the topic of this course. You are expected to read this book, digest it, connect its ideas to other issues, and produce a compelling 3–5-minute audio or video “explainer.” Your explainer should allow someone who has not read the text you’re explaining to deeply appreciate the ideas and implications of that text.

Details about the assignment will be provided separately. Some book choices will be eligible for additional bonus points.

The purpose of this assignment is to:

1. Show your ability to master a particular text, tease out its core contributions, and grapple with the ideas.
2. Reflect your ability to powerfully communicate nuanced ideas to a broad audience in an accessible way.

Explainer Comments (10%) [Due November 10]

You will be asked to consume and comment on *four* of your peers' explainer videos/podcasts. Your ~3-5 sentence comments should be reflexive and thoughtful about the content (not just the presentation). These comments will be visible to everyone in the class. You will also be asked to submit a brief (250-word) reflection note about the content you consumed.

Details will follow.

The purpose of this activity is to:

1. Learn from your peers' work.
2. Provide feedback to your peers.
3. Connect ideas in a cohesive way.

Assignment #3: A Persuasive Op-Ed (20%) [Due December 11]

For your final assignment, you will produce a 1200-1400 word (+ references) persuasive opinion ("op ed") essay about a specific data practice that has social or cultural implications. Because this is a persuasive essay, you are expected to make an argument. Perhaps you want to advocate for policymakers to take action. Perhaps you want the public to be aware of something. Perhaps you want to reach a very specific audience (like a government agency or a specific company) and encourage them to make a clear change.

Details of this assignment will be provided by mid-semester.

The purpose of this assignment is to demonstrate that you can:

1. Meaningfully and substantively engaged with the content of this class.
2. Leverage theoretical concepts in making a persuasive argument.
3. Conduct research to help you build an argument.

Moreover, as this is a communication class, this assignment invites you to develop your skills as a persuasive communicator.

Deliverables Schedule

August 29: Submit book choice for Assignment #2

September 3: Submit dataset and team selection for Assignment #1

September 29: Submit Assignment #1 poster, bring to class

October 1: Submit video for Assignment #1

November 3: Submit Assignment #2 (explainer)

November 10: Submit comments on peers' explainers
November 17: Seek feedback on Assignment #3 topic (optional)
December 11: Submit Assignment #3 (op-ed)

Overall Course Schedule

August 25, 2025

Day 1: Introduction to the course

- Overview: What will this course entail? What is expected of you?
- Brief lecture: the history of "data." What does it mean for data to talk? What can data say or not say?
- Concept: data is socially constructed.

FOUNDATIONS OF DATA

August 27, 2025

Day 2: The history of counting people

- Lecture: The state has always had use for data. The census is perhaps the most classic example of this. What does the census teach us about the role of data in society?
- Concept: data is political.
- Discussion: What is the best way to capture gender and sexual orientation?
- Assignment #1 teammate preparation discussion

Required Readings:

- Bouk, Dan. [*Democracy's Data: The Hidden Stories in the U.S. Census and How to Read Them*](#). New York: Farrar, Straus and Giroux, 2022. Chapters 0 "Stories in the Data" and 3 "Partners"

Additional Readings:

- Mora, G. Cristina. [*Making Hispanics: How Activists, Bureaucrats, and Media Constructed a New American*](#). Chicago: The University of Chicago Press, 2014.
- Nobles, Melissa. [*Shades of Citizenship: Race and the Census in Modern Politics*](#). Stanford, Calif: Stanford Univ. Press, 2000.

--- STUDENTS SHOULD SUBMIT BOOK EXPLAINER CHOICES BY AUGUST 29. ---

September 3, 2025

Day 3: Seeing ourselves in data

- Lecture: From marketing to polling to social science research, how do we look for ourselves in data? How does the state see us?
- Concepts: digital flaneur, enrolment
- Discussion: Quantitative self.
- *Discuss Assignment #1*

Required Readings:

- Igo, Sarah E. *The Averaged American: Surveys, Citizens, and the Making of a Mass Public*. Cambridge, Mass.: Harvard University Press, 2008. -- Chapter 3: “Polling the Average Populace”

Optional Readings:

- Schüll, Natasha D. 2019. “The Data-Based Self: Self-Quantification and the Data-Driven (Good) Life.” *Social Research: An International Quarterly* 86 (4): 909–30. <https://doi.org/10.1353/sor.2019.0050>.
- Callon, Michel. 1984. “Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay.” *The Sociological Review* 32 (1_suppl): 196–233. <https://doi.org/10.1111/j.1467-954X.1984.tb00113.x>.

--- SUBMIT PROPOSED DATASETS BY 8PM on SEPTEMBER 3. ---

DATA HAVE POWER

September 8, 2025

Day 4: The Value of Data

- Lecture: Where is the value of data derived? Data’s value is more than the sum of its parts.
- Concept: data as a gift
- Discussion: What does “informed consent” mean?

Required Readings:

- Ferryman, Kadija. “Reframing Data as a Gift.” Presented at the Sage Assembly, Seattle, WA, April 21, 2017. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3000631.

Optional Readings:

- Hwang, Tim, and Karen Levy. 2015. “‘The Cloud’ and Other Dangerous Metaphors - The Atlantic.” *The Atlantic*, January 20.
- Fourcade, Marion, and Daniel N Kluttz. 2020. “A Maussian Bargain: Accumulation by Gift in the Digital Economy.” *Big Data & Society* 7 (1): 205395171989709.
- Baym, Nancy K. 2011. “The Swedish Model: Balancing Markets and Gifts in the Music Industry.” *Popular Communication* 9 (1): 22–38.

September 10, 2025

Day 5: Data Brokers and Advertisers

- Lecture: The advertising industry made the buying and selling of data into a currency. The data broker ecosystem popped up in response.
- Concept: data broker
- Discussion: Explore what a social media company knows about you. Reflect on what’s surprising.

Required Readings:

- Hwang, Tim. *Subprime Attention Crisis: Advertising and the Time Bomb at the Heart of the Internet*. Farrar, Straus and Giroux, 2020.

Optional Readings:

- Sweeney, Latanya. “Discrimination in Online Ad Delivery: Google Ads, Black Names and White Names, Racial Discrimination, and Click Advertising.” *Queue* 11, no. 3 (March 2013): 10–29. <https://doi.org/10.1145/2460276.2460278>.
- Crain, Matthew. “The Limits of Transparency: Data Brokers and Commodification.” *New Media & Society* 20, no. 1 (January 2018): 88–104. <https://doi.org/10.1177/1461444816657096>.

Optional Activity: Explore what you can find about yourself at <https://joindeleteme.com/>
For 1 bonus point, upload a 1-page (~350-500 words) reflection note of what you discovered in light of class discussion.

September 15, 2025

Day 6: Platform Economics

- Lecture: Why is data the new oil? How has the race for advertising transformed into a broader effort to exploit data? How can we think about degradation?
- Concept: Enshittification
- Guest Visitor: Cory Doctorow
- Discussion: Explore the signs that a platform is starting to degrade.

Required Pre-Work:

- **Watch** (or read the transcript). Doctorow, Cory. “With Great Power Came No Responsibility.” Ursula Franklin Lecture at the University of Toronto. February 26, 2025. <https://pluralistic.net/2025/02/26/ursula-franklin/>
- OR Attend Cory’s Cornell talk on September 12 at 3PM: <https://events.cornell.edu/event/the-enshittification-of-everything-and-what-to-do-about-it-keynote-talk>
- **Send** one question to danah by midnight on September 14th. (And bring the question to class.)

Optional Readings:

- Doctorow, Cory. “The ‘Enshittification’ of TikTok. Or How, Exactly, Platforms Die.” *Wired*, January 23, 2023. <https://www.wired.com/story/tiktok-platforms-cory-doctorow/>.
- Weigel, Moira. “Amazon’s Trickle-Down Monopoly: Third Party Sellers and the Transformation of Small Businesses.” *Data & Society*, January 25, 2023. <https://datasociety.net/library/amazons-trickle-down-monopoly/>
- Caplan, Robyn, and danah boyd. “Isomorphism through Algorithms: Institutional Dependencies in the Case of Facebook.” *Big Data & Society* 5, no. 1 (January 2018): 205395171875725. <https://doi.org/10.1177/2053951718757253>.

September 17, 2025

Day 7: Manipulating Search Engines

- Lecture: History of search engines, SEO, and efforts to manipulate brokers of information.
- Concepts: SEO, data voids, Google bombing.
- Discussion: How might LLMs (like Google's AI "Overviews") affect the process of search?

Required Readings:

- Golebiewski, Michael, and danah boyd. "Data Voids: Where Missing Data Can Easily Be Exploited." *Data & Society*, October 29, 2019. <https://datasociety.net/library/data-voids/>.
- Tripodi, Francesca. "Searching for Alternative Facts: Analyzing Scriptural Inference in Conservative News Practices." *Data & Society*, May 16, 2018. <https://datasociety.net/library/searching-for-alternative-facts/>.

Optional Readings:

- Haapoja, Jesse, Laura Savolainen, Hanna Reinikainen, and Tuukka Lehtiniemi. "Moral Orders of Pleasing the Algorithm." *New Media & Society*, September 11, 2024, 14614448241278674. <https://doi.org/10.1177/14614448241278674>.

September 22, 2025 [Erev Rosh Hashanah]

Day 8: Data and Optimization

- Lecture: Companies want to leverage data to make better recommendations, manage supply chains, or otherwise optimize their work. Through the Netflix Prize, Disney's crowd management, Enron, and triage systems, we'll explore what this looks like.
- Concept: optimization
- Discussion: How do you design a scheduling software algorithm?
- *Discuss Assignment #2*

Required Podcast:

- "Blockbuster and Enron and Chill" by RIP Corp (Podcast): https://ripcorp.biz/episodes/blockbuster-and-enron-and-chill-MJHs_47V

Optional Video:

- Rilinger, Georg. *Failure by Design: The California Energy Crisis and the Limits of Market Planning*. Chicago London: University of Chicago Press, 2024.
- "Disney's FastPass: A Complicated History" by Defunctland (Video): <https://www.youtube.com/watch?v=9yjZpBq1XBE>

September 24, 2025 [Rosh Hashanah]

Day 9: Epistemology and Agnotology

- Lecture: How does data help us understand the world? And how can that knowledge production process be polluted?
- Concepts: epistemology and agnotology.
- Discussion: How might data enable ignorance instead of knowledge?

Required Readings:

- Proctor, Robert. 2008. “Agnotology: A Missing Term to Describe the Cultural Production of Ignorance (and Its Study).” In *Agnotology* (eds. Proctor and Schiebinger), pp. 1-36.
- **Choose one other Agnotology chapter to read.**

Optional Readings:

- Michaels, David. 2008. “Manufactured Uncertainty: Contested Science and the Protection of the Public’s Health and Environment.” In *Agnotology* (eds. Proctor and Schiebinger), pp. 90-107
- Oreskes, Naomi, and Erik M. Conway. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. New York, NY: Bloomsbury Press, 2011.

September 29, 2025

Day 10: Poster Expo Day (Potentially in a different room)

- No lecture.

Every student is expected to come to the expo with either a printed version of their poster or a version prepared to be shown on a laptop/tablet (not phone). Students will be “demoing” their poster for 1/2 of the time and wandering around listening to others’ demos for 1/2 of the time.

Those demoing posters will be encouraged to create a stump speech to offer insight to people coming up to them. Students who are touring are to ask questions and engage the presenters.

Details about this class are available in Assignment #1.

Please note: This class is mandatory. Failure to attend class and present your work on this day will have significant ramifications on your grade. See Assignment #1 for details and contact us immediately if this is a problem.

PRIVACY AND SURVEILLANCE

October 1, 2025 [Erev Yom Kippur]

Day 11: The Emergence of Privacy

- Lecture: Privacy is a social value whose definition is often contested. In this class, we will explore a brief history of privacy. We will dive into discussions of social security numbers and the 1960s battle over the National Data center.
- Concept: privacy
- Discussion: Should people be nationally registered? And should there be a national data center?

Required Readings:

- Warren, Samuel, and Louis Brandeis. “The Right to Privacy.” *Harvard Law Review* IV, no. 5 (December 15, 1890): 193–220. <https://www.jstor.org/stable/1321160>

Optional Readings:

- Igo, Sarah Elizabeth. *The Known Citizen: A History of Privacy in Modern America*. Cambridge, Massachusetts: Harvard University Press, 2018. Read chapter 2 (pp. 55-98).

October 6, 2025 [Erev Sukkot]

Day 12: Networked Privacy

- Lecture: Social media changed people's experiences of privacy – and created significant fights over what even constituted privacy. Let's explore different dimensions of privacy.
- Concept: Context collapse
- Discussion: What does privacy mean?
- *Discuss Assignment #3*

Required Readings:

- Marwick, Alice E, and danah boyd. "Networked Privacy: How Teenagers Negotiate Context in Social Media." *New Media & Society* 16, no. 7 (November 2014): 1051–67. <https://doi.org/10.1177/1461444814543995>.

Optional Readings:

- Lyon, David. "Surveillance Culture: Engagement, Exposure, and Ethics in Digital Modernity." *International Journal of Communication* 11 (2017): 824–42. <https://ijoc.org/index.php/ijoc/article/viewFile/5527/1933>

October 8, 2025

Day 13: Refractive Surveillance

- Lecture: Whose data is being used to control whom?
- Concept: Refractive surveillance
- Discussion: How does refractive surveillance shape education and everyday interactions?

Required Readings:

- Levy, Karen, and Solon Barocas. "Refractive Surveillance: Monitoring Customers to Manage Workers." *International Journal of Communication* 12 (2018). <https://ijoc.org/index.php/ijoc/article/viewFile/7041/2302>

Optional Readings:

- Nguyen, Aiha, and Eve Zelickson. "At the Doorstep: How Customers Use Doorbell Cameras to Manage Delivery Workers." *Data & Society*, October 12, 2022. <https://datasociety.net/library/at-the-digital-doorstep/>.
- Van Oort, Madison. "The Emotional Labor of Surveillance: Digital Control in Fast Fashion Retail." *Critical Sociology* 45, no. 7–8 (November 2019): 1167–79. <https://doi.org/10.1177/0896920518778087>.

October 15, 2025

Day 14: The Politics of Categories and Classification

- Lecture: Data's categories are socially constructed. Nowhere is this more visible than when it comes to how race is captured in datasets. Classification schemes have significant political ramifications around the world.

- Concepts: eugenics, regression, and race science.
- Discussion: How have race categories shaped how we understand ourselves?

Required Readings:

- Geoffrey Bowker and Susan Leigh Star. *Sorting Things Out: Classification and Its Consequences*. Cambridge, Massachusetts: MIT Press, 1999. Ch 6 [“The Case of Race Classification and Reclassification Under Apartheid”](#)

Additional Readings:

- Chun, Wendy Hui Kyong. *Discriminating Data: Correlation, Neighborhoods, and the New Politics of Recognition*. Cambridge, Massachusetts: The MIT Press, 2021.

A DATA-SOAKED WORLD

October 20, 2025

Day 15: The Gig Economy

- Lecture: How gig economy leverages data, Uber’s phantom cars
- Concepts: Financialization
- Discussion: Is it ethical to use ridehailing?

Required Readings:

- Cameron, Lindsey D. “The Making of the ‘Good Bad’ Job: How Algorithmic Management Manufactures Consent Through Constant and Confined Choices.” *Administrative Science Quarterly* 69, no. 2 (June 2024): 458–514. <https://doi.org/10.1177/00018392241236163>.
- Rosenblat, Alex. “Uber’s Phantom Cars.” July 27, 2015. *Vice Magazine*. <https://www.vice.com/en/article/ubers-phantom-cabs/>

Optional Readings:

- Rosenblat, Alex. *Uberland: How Algorithms Are Rewriting the Rules of Work*. University of California Press, 2018.
- Rahman, Hatim A. *Inside the Invisible Cage: How Algorithms Control Workers*. University of California Press, 2024.

October 22, 2025

Day 16: Risk Assessment Scores

- Lecture: Risk assessment scores are used in a variety of contexts, from criminal justice to medical triage to insurance. How do we think about what data is behind them and the work that these scores play?
- Concept: scoring
- Discussion: Should risk assessment scores be used in judicial decision making?

Required Readings:

- Brayne, Sarah, and Angèle Christin. “Technologies of Crime Prediction: The Reception of Algorithms in Policing and Criminal Courts.” *Social Problems* 68, no. 3 (August 5, 2021): 608–24. <https://doi.org/10.1093/socpro/spaa004>.
- Feiner, Lauren. “Judges Are Using Algorithms to Justify Doing What They Already Want.” *The Verge*, October 30, 2024. <https://www.theverge.com/2024/10/30/24281924/pretrial-risk-assessment-algorithms-research>.

Optional Readings:

- O’Neil, Cathy. *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. New York: Crown, 2016.

October 27, 2025

Day 17: Through the Eyes of Genetics

- Lecture: How does access to genetic data reconfigure how we see ourselves? How does it shape how we position ourselves in relationship to others? Dive into the politics and ethics of 23andme.
- Concept: forensic genetic genealogy
- Discussion: What are the politics of genetic data?

Required Listening:

- TallBear, Kim. 2019. “Can a DNA test make me Native American?” All My Relations Podcast: <https://www.allmyrelationspodcast.com/podcast/episode/33235119/can-a-dna-test-make-me-native-american>

Optional Readings:

- Nelson, Alondra. “Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry.” *Social Studies of Science* 38, no. 5 (October 2008): 759–83. <https://doi.org/10.1177/0306312708091929>.

THE AI TURN

October 29, 2025

Day 18: Responsible AI

- Lecture: As generative AI has been proliferating, “responsible AI” teams have been popping up in companies to “fix” the problems with AI. What does this look like in practice?
- Concept: AI Red-Teaming
- Discussion: How should we define “responsible AI”?

Required Readings:

- Metcalf, Jacob, Emanuel Moss, and danah boyd. “Owning Ethics: Corporate Logics, Silicon Valley, and the Institutionalization of Ethics.” *Social Research: An International Quarterly* 86, no. 2 (June 2019): 449–76. <https://doi.org/10.1353/sor.2019.0022>.

Optional Readings:

- Zhang, Alice Qian, Judith Amores, Hong Shen, Mary Czerwinski, Mary L. Gray, and Jina Suh. 2025. “[AURA: Amplifying Understanding, Resilience, and Awareness for Responsible AI Content Work.](#)” *Proceedings of the ACM on Human-Computer Interaction* 9 (2): 1–45.
- Singh, Ranjit, Borhane Bili-Hamelin, Carol Anderson, Emnet Tafesse, Briana Vecchione, Beth Duckles, Jacob Metcalf. “Red-Teaming in the Public Interest.” *Data & Society*, February 9, 2025. <https://datasociety.net/library/red-teaming-in-the-public-interest/>
- Delgado, Fernando, Stephen Yang, Michael Madaio, and Qian Yang. 2023. “The Participatory Turn in AI Design: Theoretical Foundations and the Current State of Practice.” *Equity and Access in Algorithms, Mechanisms, and Optimization*, October 30, 1–23. <https://doi.org/10.1145/3617694.3623261>.

November 3, 2025

Day 19: Humans-in-the-Loop

- Lecture: Humans in the loop are often seen as a way to ensure that technical systems are responsible in practice. But does this enable accountability? Is this a wise configuration?
- Concepts: moral crumple zones, content moderation
- Discussion: How can we identify problematic human-in-the-loop configurations?

Required Readings:

- Elish, Madeleine Clare, and Watkins, Elizabeth Anne. “Repairing Innovation: A Study of Integrating AI in Clinical Care.” *Data & Society*, September 30, 2020. <https://datasociety.net/library/repairing-innovation/>.

Optional Readings:

- Elish, Madeleine Clare. “Moral Crumple Zones: Cautionary Tales in Human-Robot Interaction.” *Engaging Science, Technology, and Society* 5 (March 23, 2019): 40–60. <https://doi.org/10.17351/ests2019.260>.
- Mateescu, Alexandra, and Madeleine Clare Elish. “AI in Context: The Labor of Integrating New Technologies.” *Data & Society*, January 30, 2019. <https://datasociety.net/library/ai-in-context/>.

--- STUDENTS’ EXPLAINER VIDEO/PODCASTS ARE DUE. ---

INFRASTRUCTURES

November 5, 2025

Day 20: The materiality of data

- Lecture: Let’s explore the physical infrastructure behind the data centers and data flows.
- Concept: infrastructure
- Discussion: Can you trace the flow of data and its materiality?

Required Readings:

- Burrington, Ingrid. “The Environmental Toll of a Netflix Binge.” *The Atlantic*, December 16, 2015. <https://www.theatlantic.com/technology/archive/2015/12/there-are-no-clean-clouds/420744/>.

Optional Readings:

- Wang, Xiaowei. *Blockchain Chicken Farm: And Other Stories of Tech in China's Countryside*. New York: Farrar, Straus and Giroux, 2020.
- Starosielski, Nicole. *The Undersea Network: Sign, Storage, Transmission*. Durham, N.C. London: Duke university press, 2015.

November 10, 2025

Day 21: TBD Flex Day

November 12, 2025

Day 22: Data infrastructures

- Lecture: Let's turn to weather forecasting and air traffic controllers to appreciate how data infrastructures and standards support practices.
- Concepts: data infrastructure, standards, ethnocognition
- Discussion: Can computers replace air traffic controllers?

Required Readings:

- Edwards, Paul N. *A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming*. Cambridge, Mass.: MIT Press, 2013. Read Ch 6 “Numerical Weather Prediction” and Ch 10 “Making Data Global”

Optional Readings:

- Singh, Ranjit, and Steven Jackson. “Seeing Like an Infrastructure: Low-Resolution Citizens and the Aadhaar Identification Project.” *Proceedings of the ACM on Human-Computer Interaction* 5, no. CSCW2 (2021): 1–26. <https://dl.acm.org/doi/10.1145/3476056>
- Lampland, Martha, and Susan Leigh Star, eds. *Standards and Their Stories: How Quantifying, Classifying, and Formalizing Practices Shape Everyday Life*. Ithaca, NY: Cornell University Press, 2009.
- Daipha, Phaedra. *Masters of Uncertainty: Weather Forecasters and the Quest for Ground Truth*. Chicago: The University of Chicago Press, 2015.
- Vaughan, Diane. *Dead Reckoning: Air Traffic Control, System Effects, and Risk*. Chicago: The University of Chicago Press, 2023.

--- STUDENTS' EXPLAINER VIDEO/PODCASTS COMMENTS ARE DUE. ---

November 17, 2025

Day 23: Data Supply Chains

- Lecture: Data flow beyond how they are originally collected. How can we understand the flow of data in a world where data are cleaned and reused? How can we attempt to track the provenance of data? How do we grapple with the decay of data?

- Concepts: Data provenance, cleaning.
- Discussion: Apply data supply chains to your data set

Required Readings:

- Gebru, Timnit, Jamie Morgenstern, Briana Vecchione, Jennifer Wortman Vaughan, Hanna Wallach, Hal Daumé, and Kate Crawford. “Datasheets for Datasets.” arXiv, 2018. <https://doi.org/10.48550/ARXIV.1803.09010>.

Optional Readings:

- Finn, Megan, and Mike Ananny. “Making Events: How Anticipatory Infrastructures Produce Shared Temporalities.” *New Media & Society*, March 15, 2024, 14614448241236709. <https://doi.org/10.1177/14614448241236709>.

November 19, 2025

Day 24: Maintenance, Repair, and Resistance

- Lecture: Both technical systems and data infrastructures must be maintained. Yet, the pressure for innovation often ignores this critical maintenance work. All data must be cleaned, edited to be useful. Data infrastructures must be maintained.
- Lecture: What does it mean to opt out? What does resistance to our sociotechnical world look like?
- Concepts: maintenance, innovation
- Concepts: Obfuscation
- Discussion: What makes innovation so much more appealing than maintenance?
- Discussion: What makes resistance so hard?

Required Reading:

- Russell, Andrew L., and Lee Vinsel. “Hail the Maintainers.” *Aeon*, April 7, 2016. <https://aeon.co/essays/innovation-is-overvalued-maintenance-often-matters-more>
- Vertesi, Janet. “Data Free Disney.” *Public Books*, January 31, 2023. <https://www.publicbooks.org/data-free-disney/>.

Optional Readings:

- Gangadharan, Seeta Peña. “Digital Exclusion: A Politics of Refusal.” In *Digital Technology and Democratic Theory*, edited by Hélène Landemore, Rob Reich, and Lucy Bernholz. University of Chicago Press, 2021. <https://doi.org/10.7208/chicago/9780226748603.001.0001>.
- Irani, Lilly. *Chasing Innovation: Making Entrepreneurial Citizens in Modern India*. Princeton Studies in Culture and Technology. Princeton Oxford: Princeton University Press, 2019.
- Shestakofsky, Benjamin. *Behind the Startup: How Venture Capital Shapes Work, Innovation, and Inequality*. Oakland, California: University of California Press, 2024.
- Vinsel, Lee, and Andrew L. Russell. *The Innovation Delusion: How Our Obsession with the New Has Disrupted the Work That Matters Most*. New York: Currency, 2020.

- Brunton, Finn, and Helen Nissenbaum. “Vernacular Resistance to Data Collection and Analysis: A Political Theory of Obfuscation.” *First Monday* 16, no. 5 (2011). <https://firstmonday.org/ojs/index.php/fm/article/download/3493/2955>.

Optional Activity: Explore the Opt-Out Cleanse over the break:

<https://www.optoutproject.net/the-cyber-cleanse-take-back-your-digital-footprint/>

Submit a 1-page reflection document of what you did as a result for 1 extra bonus point.

November 24, 2025

Day 25: Data Dystopia

- View and reflect on the Black Mirror episode [Nosedive](#)

BROADER THEORIES

December 1, 2025

Day 26: The Power of Networks

- Lecture: The power of Silicon Valley stems from how it is structured. Networks of relationships (e.g., VCs, entrepreneurs, etc.) form the backbone of network power. At the same time, tools that reflect networks have been the cornerstone of contemporary technical developments (e.g., social network sites, neural networks, etc.). Let’s understand how networks operate in shaping data-driven technologies.
- Concept: network power
- Discussion: How is inequality reinforced through network capital?

Required Readings:

- Castells, Manuel. “A Network Theory of Power.” *International Journal of Communication* 5 (2011): 15. <https://ijoc.org/index.php/ijoc/article/view/1136>

Optional Readings:

- Lewis, Rebecca. “Alternative Influence: Broadcasting the Reactionary Right on YouTube.” *Data & Society*, September 18, 2018. <https://datasociety.net/library/alternative-influence/>.
- Farrell, Henry, and Abraham Newman. [*Underground Empire: How America Weaponized the World Economy*](#). New York: Henry Holt and Company, 2023.

December 3, 2025

Day 27: Determinism and Solutionism

- Lecture: Deterministic and solutionistic language pervade both the tech industry and policymaking discussions. Let’s talk about the role that this framing plays and why it is important to shift towards an interventionist orientation around data-driven technologies.
- Concepts: Technosolutionism, techno-legal solutionism
- Discussion: Why is technological determinism so appealing?

Required Readings:

- Angel, María P., and danah boyd. “Techno-Legal Solutionism: Regulating Children’s Online Safety in the United States.” In *Proceedings of the Symposium on Computer Science and Law*, 86–97. Boston MA USA: ACM, 2024.
<https://doi.org/10.1145/3614407.3643705>.

Optional Readings:

- Weinberg, Alvin M. “Can Technology Replace Social Engineering?” *American Behavioral Scientist* 10, no. 9 (May 1, 1967): 7–7.
<https://doi.org/10.1177/0002764201000903>.
- Selbst, Andrew D., danah boyd, Sorelle A. Friedler, Suresh Venkatasubramanian, and Janet Vertesi. 2019. “Fairness and Abstraction in Sociotechnical Systems.” *Proceedings of the Conference on Fairness, Accountability, and Transparency*, January 29, 59–68.
<https://doi.org/10.1145/3287560.3287598>.

December 8, 2025

Day 28: Recap

--- PERSUASIVE ESSAYS ARE DUE DECEMBER 11. ---