University of Maryland
College of Information Studies

INST 201:
Introduction to Information Science

Spring 2022 | Online | Asynchronous
Course Dates: January 24 – May 10

Instructor:

Name: Caitlin Christian-Lamb
Pronouns: she/her/hers
Office Hours: by appointment; schedule here: https://calendly.com/caitlin-christian-lamb
(meetings via Zoom unless specifically requested in-person or via other platform)
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Graduate TA:

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Questions?

Professor Christian-Lamb should be contacted with general concerns about class, assignment extensions, or other specifics on course concepts: cclamb@umd.edu.
The undergraduate TAs or graduate TA should be contacted with specific questions about assignments, readings, and general course concepts.

Your order of go for most questions about the class:
First: the undergraduate TAs
Second: graduate TA
Third: Professor Christian-Lamb
Always check the syllabus first. Answers are usually there.
When sending emails to your TAs or Professor Christian-Lamb, please begin your subject lines with "INST201." Thanks!

CATALOG DESCRIPTION:

Examining effects of new information technologies on how we conduct business, interact with friends, and go through our daily lives. Understanding how technical and social factors have influenced evolution of information society. Evaluating the transformative power of information in education, policy, and entertainment—and the dark side of these changes.

COURSE DESCRIPTION:

We live in an increasingly networked information society, characterized by a complex relationship between information & communication technologies (ICT) and the people who use them. While most individuals, organizations, and governments are quick to adopt new technologies, they rarely take the time to consider how that technology is shaping their behaviors and, conversely, how users shape the development of future technologies. This course will provide you with the foundational knowledge needed to begin addressing key issues associated with the rise of the Information Society. Issues will range from the theoretical (what is information and how do humans construct it?), to the cultural (how are newer communication technologies different from earlier distance-shrinking and knowledge-building technologies such as telephones?), to the technical (what are the basic architectures of computing networks?). Successful completion of this course will give you the conceptual tools necessary to understand the social, political, and economic factors associated with a networked society. As a core course in the Bachelor of Science in Information Science (BSIS), this class will also provide you a knowledge-based foundation for future courses in information, technology, and policy.

LEARNING OUTCOMES & COURSE OBJECTIVES:

At the conclusion of this class, you should be able to:

- Demonstrate knowledge of fundamental concepts and ideas around the rise of the information society.

- Demonstrate critical thinking in evaluating causal arguments regarding the relationship between technology and society, including analyzing major assertions, background assumptions, and explanatory evidence.
- Explain how information & communication technologies (ICTs) shape national and global events.
- Use information technologies to conduct research and to communicate effectively about ICTs.
- Articulate how the historical events leading to the information society have shaped our modern-day use of ICTs.
- Articulate ways technology use can be problematic, and how to harness technology for positive change.
- Work collaboratively to create and convey information content.

REQUIRED CLASS MATERIALS:

There is no textbook for this course. Course readings are located on ELMS and are a mix of academic articles, journalism, and other materials. Some readings are publicly available on the internet. If you are having trouble accessing the readings, contact the Tas – it's possible some readings may be behind limited access paywalls (i.e. only 5 articles a month for free etc.). Those cases the TA's and the professors can help you access a .pdf of the reading. Course readings are subject to change, so make sure you check ELMS for any updates before you dig into a given week's readings. I will also sometimes assign videos or art pieces to check out before class; these will all be publicly available through sites like YouTube and links will be posted on ELMS.

COURSE STRUCTURE:

This course will be taught asynchronously online using Canvas/ELMS; course content is accessible via http://elms.umd.edu ("INST201").

This course involves lectures, online discussion, quizzes, research activities, and one semester-long group project. Each week consists of two lectures (Monday and Wednesday), and recitation section (Fridays). The recitation sections are devoted to conducting research activities and making progress on the semester-long group project. These sections are not optional. Failure to complete recitation section assignments will negatively impact your grade.

Pre-recorded lectures will be posted every Monday and Wednesday that we have class. Friday recitation sections can be conducted whenever convenient for you and your group project team members, when group project assignments are due – i.e., you could choose to meet another day, other than Fridays, if that works better for you and your group's schedules, so long as you are reserving time for recitation every week. Occasionally I may post a short lecture on Fridays if it's necessary to the material we're covering that week, or to give guidance on upcoming assignments.

Lectures and discussion assignments are designed with the assumption that you have read the assigned material beforehand: they build on and develop the ideas presented in the readings, they

don't just review them. So, for best results: you should complete the assigned readings/videos/audio before lecture and discussion (see syllabus and ELMS for reading assignments).

The syllabus is a living document and changes may be made to meet certain class needs or respond to current events relevant to class. Changes will be announced ahead of time. The most current syllabus is always the one on ELMS.

Each week is themed around a major topic in Information Science, Sociotechnical Studies, and current events in technology and society. Some themes, like Data or Political Change, are spread across multiple weeks.

COURSE ACTIVITES & GRADING:

Each course activity is worth a set number of points. There are 1000 total possible points in the semester. Grades are updated regularly on ELMS (your patience is appreciated—there are nearly 150 of you altogether!). You should always be able to calculate your current points total, how many points on a certain assignment you need to reach a certain grade, etc, based on posted totals. There is no need to email your instructor or your TAs with these questions. Assignments with an asterisk (*) will have a grading rubric available on ELMS. Make sure you review the rubric before submitting your assignment. All deadlines are due by midnight on the assigned date unless otherwise specified.

At the start of term, you will be randomly assigned to a group of 5-7 total students. This will be your core work and discussion group for the semester. You will be expected to coordinate and work together outside of class on the Research Report as well as other assignments. You may use whatever platform(s) work best for you to achieve this collaboration. In previous years, students have used GroupMe, ELMS, GoogleDrive, group chats, Discord, and other services.

Here are the assignment and point breakdowns for the term:

1. Research Report (Group Project) (405 points; multiple parts) *
2. Picturing Infrastructure (Group Project) (25 points)
3. Reading Quizzes (150 points total, 10 quizzes, 15 points per quiz)
4. Discussion Prompts (210 points total, 14 prompts, 15 points each)
5. Lectures Tickets (210 points total, 14 prompts, 15 points each)
6. Extra credit opportunities (up to 100 points) *

ASSIGNMENTS:

Research Report (Group Project) (405 points, multiple dates): This is the major project of the class. In the second week of term, you and your Core Group be assigned a broad research topic, a piece of technology or an issue related to information technology, to be the subject of your Research Report. This Report is broken up into multiple assignments and will require you to coordinate and work together with the rest of your group. There will be one final deliverable, a 3,000 word report (at least 10 double spaced pages) along with a peer evaluation.

The final Research Report should contain five integrated sections:

- A **history** of the technology or issue's precursors (why are these things related?)
- An **account** of the technology or issue's major developmental milestones
- A **review** of contemporaneous social, political, and cultural impacts and reactions to the technology or issue, including controversies, panics, or utopian idealizations
- An **argument** for what the technology or issue's impacts have been and why.
- A **prediction** for how the technology or issue will develop and impacts the technology will have in the near future.

The Research Report is completed in several stages:

- Selecting and refining your research topic (40 points; brainstorming exercise)
- Group Project Contract (40 points)
- Critical Research Review (50 points; recitation/group meeting time)
- Field Work Report (50 points; recitation/group meeting time)
- Outline #1 (50 points; recitation/group meeting time)
- First Draft (50 points)
- Final Paper (100 points)
- Peer Evaluation (25 points)

Picturing Infrastructure (25 points): This assignment will be completed with your working group and involves identifying and taking pictures of ICT infrastructure in your local area.

Reading Quizzes (150 points, 15 per quiz, multiple dates): These short, open book quizzes are made up of simple multiple choice, matching, and true/false questions designed only to make sure that you are keeping up with the readings and viewing lectures. There are no trick questions. If you have done the readings and taken notes on the lectures throughout the previous week, you will get a good grade on these quizzes. Quizzes are taken on Canvas and can cover any material covered up to the due date. Quizzes are announced on Monday and are due at midnight on Friday. Quizzes cannot be retaken.

Discussion (210 points, 15 per discussion, due weekly by midnight on Friday):
A discussion prompt will be posted every week on Monday, when Monday's lecture is posted. Some discussion prompts will require further research on your part, some will require you to work with your groups to produce a contribution together. To get full points for participating in discussion, you must (unless otherwise noted):

- post an initial comment that engages with the prompt of no less than 200 words. (worth 8 points)
- thoughtfully respond to at least one other student's comment (you are encouraged to respond to more than one!). (worth 7 points)

Here's a brief preview of the questions we might address in our discussions:

- How is information organized on campus?
- How is your personal data sold, processed, and represented on the internet?
- How does the campus surveil people inside it? What vulnerabilities are there in that security system?
- What is the broadband penetration in your hometown? How competitive is the digital connectivity market? How does this impact connectivity?

To receive full credit for participation, you must submit your initial comment by midnight on Thursday and your response by midnight on Friday.

Lectures Tickets (210 points, 15 per week): You are expected to view each lecture in full the week the lecture is posted. After you view both lectures, you must submit an exit ticket, listing three things you learned from the lectures that week. You will receive 15 points for completing that week's lecture ticket.

Extra credit opportunities (25 points each, up to 100 total, multiple dates): Extra credit opportunities give you a chance to engage with course material outside of class. Extra credit assignments should be submitted through the Extra Credit Assignment page ELMS.

There are two basic types (so far):

- Watch lectures at the Maryland Institute for Technology in the Humanities (MITH) or the Center for the Advanced Study of Communities and Information (CASCI), or the Berkman-Klein Center for Internet and Society on YouTube, and write a report (~500 words) about its relationship to our readings.
- Read the entirety of a book from the following list or watch a selected film and write a short report (~500 words) about its relationship as a whole to our readings. Less than half of your report should be dedicated to a summary of the book or film. The majority of your report should be dedicated to analyzing the relationship between the text and our class.

BOOKS
Ursula Franklin. *The Real World of Technology*.
Gregory Downey. *Telegraph Messenger Boys*.
Nathan Ensmenger. *The Computer Boys Take Over*.
James C. Scott. *Seeing Like A State*.
Josh Lauer. *Creditworthy*.
David Naguib Fellow and Lisa Sun-Hee Park. *Silicon Valley of Dreams*.
Bruce Sterling. *The Hacker Crackdown*.
Stephen Levy. *Hackers*.
-Crypto.
Gretchen Bakke. *The Grid*.
David Nye. *When the Lights Went Out*.
Nancy Baym. Personal Connections in the Digital Age.

Finn Brunton. *Spam: A Shadow History of the Internet*.
Gabriella Coleman. *Coding Freedom.*
-Hacker Hoaxer Whistleblower Spy.
M.R. Sauter. *The Coming Swarm.*
Zeynep Tufekci. *Twitter and Tear Gas: The Power and Fragility of Networked Protest*.
Lucie Greene. *Silicon States*.
Cathy O'Neil. *Weapons of Math Destruction.*
Tim Maughan, *Infinite Detail.*
Cory Doctorow, *Little Brother.*
-Pirate Cinema.
-Makers.
-Down and Out in the Magic Kingdom.
-Eastern Standard Tribe.
-For the Win.

FILMS
Sneakers (1992, dir. Phil Alden Robinson)
Hackers (1995, dir. Iain Softley)
Wargames (1983, dir. Lawrence Lasker)
The Net (1995, dir. Irwin Winkler)
Newsies (1992, dir. Kenny Ortega)

Other opportunities for extra credit can be announced throughout the semester.

Due each week: With some notable exceptions, you can expect the following assignments to be due each week:
Discussion Board assignment: opens on *Monday*. First post due by *Thursday*.
Response post due by *Friday*.
Lecture Tickets: Due by *Friday*.
Quizzes: Open on *Monday*, due by *Friday*.

Research Report and Recitation Activity Assignments are typically due one full week after they are originally assigned. So an activity assigned on Friday February 4 would be due on Friday February 11. Unless otherwise noted, all Research Report and Recitation Activity Assignments are expected to be completed with your Working Group.

GRADE EVALUATION:

Due Dates: Unless otherwise noted, assignments are always due *by 11:59 PM on Fridays*. However, there is no penalty for lateness if assignments are submitted by 11:59 PM on the following *Monday*.

Missed Deadlines: If you will not be able to meet an assignment deadline, contact Professor Christian-Lamb before the due date to explain why you will need to submit the assignment late and what your plan is; these will be evaluated on a case-by-case basis. Technical difficulties are not an excuse for late assignments, missing quizzes, or not participating in discussion. If you are having

trouble with ELMS/Canvas, contact Professor Christian-Lamb to arrange alternate an alternate way to submit your assignment.

Late Assignments Policy: Unless prior permission has been granted, no late work is accepted after the Monday following the original deadline. This policy is in place to ensure all students have their work returned to them in a timely fashion. Please prepare in advance so that you will not encounter technical difficulties that may prevent submission of a given assignment. If you have a conflict with the due date, assignments can always be submitted early. Generally speaking, illness is not an excuse for late assignments. As mentioned above, extensions can be requested and will be evaluated on a case-by-case basis. Missing a deadline can be compensated for by completing extra credit activities.

Grading: The primary purpose of the grades is to provide an accurate assessment of how well you know the concepts, techniques, and tools that are the focus of the class. Each assignment will be graded based on a rubric available to you. If you believe that a grade you received does not accurately reflect your knowledge and ability (either due to a grading error or a trivial misunderstanding on your part), you may raise the issue within one week of receiving the grade by either (a) sending me and your TAs an e-mail or (b) speaking with me or your TAs in office hours. After considering the issue, I will adjust your grade (either up or down) to best reflect your knowledge of the material.

Final Grades: Final grades will be submitted 48-72 hours after the 'final exam'. Because grades are issued in points, rather than percentages, there is no rounding up or down. Because grades are calculable throughout the semester and because copious extra credit opportunities are available, **I will not respond to email requests for a grade bump at the end of the semester.**

The cutoffs are as follows:

A+ 970-1000 pts.	C+ 770-799
A 930-969	C 730-769
A- 900-929	C- 700-729
A 930-969	D+ 670-699
B+ 870-899	D 630-669
B 830-869	D- 600-629
B- 800-829	F less than 600

In this class, an "A" denotes full achievement of the goals of the class, a "B" denotes good progress towards the learning objectives, and a "C" indicates that you were able to comprehend the concepts involved but were unable to effectively apply that knowledge. Since the grading is based on a point-based system, an F is not the same thing as a zero. Failing work still earns *some* points. **You are always better off turning something in and getting feedback on what you were able to complete – earning some points are better than earning zero points.** The point- based system also means that you can keep track of your progress and always know what your current grade is in the course. You are encouraged to monitor your own performance.

POLICY ON ACADEMIC MISCONDUCT:

Cases of academic misconduct will be referred to the Office of Student Conduct irrespective of scope and circumstances, as required by university rules and regulations. It is crucial to understand that the instructors do not have a choice of following other courses of actions in handling these cases. There are severe consequences of academic misconduct, some of which are permanent and reflected on the student's transcript. For details about procedures governing such referrals and possible consequences for the student please visit https://academiccatalog.umd.edu/undergraduate/registration-academic-requirements-regulations/academic-integrity-student-conduct-codes/.

It is very important that you complete your own assignments, and do not share any files or other work. The best course of action to take when a student is having problems with an assignment question is to contact the instructor. The instructor will be happy to work with students while they work on the assignments.

University of Maryland Code of Academic Integrity
The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic 8 integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information, see the same link as above: https://academiccatalog.umd.edu/undergraduate/registration-academic-requirements-regulations/academic-integrity-student-conduct-codes/.

Students have a responsibility to familiarize themselves with violations of the Code of Academic Integrity. Among these include:

1. **Cheating:** "Intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise."
2. **Fabrication:** "Intentional and unauthorized falsification or invention of any information or citation in an academic exercise."
3. **Facilitating Academic Dishonesty:** "Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty."
4. **Plagiarism:** "Intentionally or knowingly representing the words or ideas of another as one's own in an academic exercise."

University Resources for Students in Need
Students with disabilities should inform me of their needs at the beginning of the semester. Please also contact the Accessibility and Disability Service (301-314-7682) or https://www.counseling.umd.edu/ads/. ADS will make arrangements with you and me to determine and implement appropriate academic accommodations.

Students who want help improving their writing are encouraged to visit UMD's Writing Center, where trained coaches will help you plan out assignments or edit drafts: www.english.umd.edu/academics/writingcenter.

Students seeking more general support on specific skills necessary to be successful in college, or just looking for general help on how to manage their workload, are encouraged to visit Learning Assistance Services: https://lasonline.umd.edu/.

Students encountering psychological problems that hamper their course work are referred to the Counseling Center (301-314-7651 or http://www.counseling.umd.edu/) for expert help.

If you or someone you know has trouble procuring food please visit the campus food pantry: http://campuspantry.umd.edu/.

If you or someone you know feels unsafe, the university has resources (see list below). Please note that both Professor Christian-Lamb and your TAs are mandatory reporters under the UMD sexual misconduct policy, meaning that if we hear about sexual misconduct we are required by law to report it to the University for further investigation. Students impacted by sexual assault should contact OCRSM (below) for administrative support and CARE to Stop Violence for counseling support: http://health.umd.edu/care.

Read more about hate-based crimes here: https://diversity.umd.edu/bias/faqs.

University Counseling Center: tel. 301-314-7651 www.counseling.umd.edu
University Health Center and Mental Health Services: tel. 301-314-8180 www.health.umd.edu
University of Maryland Chaplains: https://www.thestamp.umd.edu/memorial_chapel/chaplains
Office of Civil Rights and Sexual Misconduct: tel. 301-405-1142 www.ocrsm.umd.edu

Statement of Support Students with Children
I welcome and support students who are parents. I appreciate that parenthood presents unique challenges and demands on a student's time and availability. If childcare constraints present an issue with timing around course assignments, I invite student parents to work with me to discuss alternate arrangements. I also welcome and support pregnant students and will provide possible accommodations and discuss arrangements so that students can complete course requirements.

Names/Pronouns and Self-Identifications
The University of Maryland recognizes the importance of a diverse student body, and we are committed to fostering inclusive and equitable classroom environments. I invite you, if you wish, to tell us how you want to be referred to both in terms of your name and your pronouns. The pronouns someone indicates are not necessarily indicative of their gender identity. Visit trans.umd.edu to learn more. Pronouns can also be added to your name/profile on Canvas/ELMS.

Additionally, how you identify in terms of your gender, race, class, sexuality, religion, and dis/ability, among all aspects of your identity, is your choice whether to disclose (e.g., should it come up in classroom conversation about our experiences and perspectives) and should be self-identified, not

presumed or imposed. I will do my best to address and refer to all students accordingly, and I ask you to do the same for all of your fellow Terps.

Emergency Preparedness. For complete information, please visit: https://prepare.umd.edu/.

UMD COVID-19 Information. Information about clearance to visit campus in person, COVID-19 testing, guidelines for Spring 2022, and other 4Maryland campaign information, can be found here: https://umd.edu/4Maryland. Current data related to COVID-19 cases and vaccination rates on and around campus can be found via by the UMD COVID-19 Dashboard: https://umd.edu/covid-19-dashboard.

CourseEvalUM. Course evaluations are a part of the process by which the University of Maryland seeks to improve teaching and learning. The University Senate approved the implementation of a standard, online, University-wide course evaluation instrument. Each course evaluation contains a set of universal questions, and some are supplemented by questions from specific colleges. Across the University, course evaluations are being administered through a web-based system dubbed CourseEvalUM. Students who leave no "Pending" evaluations in their Evaluation Dashboard each semester can view the aggregate results of a sub-set of universal items online.

All information submitted to the Evaluation System is confidential. Instructors and academic administrators can only view summarized evaluation results after final grades have been submitted. Instructors and academic administrators cannot identify which submissions belong to which students. This standardized set of evaluation results provides the University with useful information on teaching and student learning across the campus.

For additional info see CourseEvalUM Help Center at:
https://confluence.umd.edu/display/courseeval/CourseEvalUM+Help+Center.

TIPS FOR A SUCCESSFUL SEMESTER:

1. Take lectures seriously. Do the readings before you view the lectures. Take discussion seriously. View the lectures and do the readings before you post your comments.
2. Struggling with classes in general? Talk to Professor Christian-Lamb, friends, family, and/or the counseling center. We will work with you to help you succeed.
3. Engage in class discussions. Ask questions. Share your opinions. Be open to others' viewpoints, even if they're different than your own.
4. Manage your time. Make time for your online learning and participation in discussions each module. Give yourself plenty of time to complete assignments including extra time to handle any technology related problems.
5. Login regularly. Log in to Canvas/ELMS several times per module to view announcements, discussion posts and replies to your posts.
6. Do not fall behind. This class moves at a quick pace and each week builds on the previous. It will be hard to keep up with the course content if you fall behind in the pre-work or post-work.

7. Use Canvas/ELMS notification settings. Canvas/ELMS can ensure you receive timely notifications in your email or via text. Be sure to enable announcements to be sent instantly or in a daily digest.
8. Have a question outside of class? After checking the syllabus and ELMS, feel free to contact Professor Christian-Lamb or the TAs via email. Make sure to include the course number (INST201) in the subject line. If 48 hours have passed and you have not received a response, feel free to send a reminder email.
9. Visit Professor Christian-Lamb or your TAs during office hours to talk about course content or anything else on your mind. In general, if you think the answer to your question is longer than a sentence or two, it's better to talk in person than over email.
10. Know your rights as an undergraduate student at UMD: University of Maryland Policies for Undergraduate Students.

WEEK BY WEEK OVERVIEW:

WEEK 1: WHAT IS INFORMATION

MONDAY JANUARY 24

READINGS

-None! But there's still lecture that will be posted to view!

WEDNESDAY JANUARY 26

READINGS

-Ursula Franklin, *The Real World of Technology*. Anansi Press.1990. pp. 1-26 [ELMS]

FRIDAY JANUARY 28

READINGS

-Paul Edwards "How to Read a Book 5.0" http://pne.people.si.umich.edu/PDF/howtoread.pdf
-June Lester and Wallace C. Koehler (2007) "Fundamental Concepts of Information" [ELMS]

RECITATION - Assigned: Zip!
Due: Ziltch!
Lecture: Catch Up/Open Office Hours

DISCUSSION BOARD: Introduce Yourself to Your Classmates

WEEK 2: FOUNDATIONS OF INFORMATION TECHNOLOGY

MONDAY JANUARY 31

READINGS

- Downey, Greg, "Telegraph Messenger Boys: Crossing theBorders Between History of Technology and Human Geography." [ELMS]
-Jonathan Sterne, "Compression: A Loose History" [ELMS]

WEDNESDAY FEBRUARY 2

READINGS

-Nathan Ensmenger, "Chapter 1: Computer Revolutionaries," *TheComputer Boys Take Over.* (2010) pp 1-26 [ELMS]

-Rheingold, Howard, "Visionaries and Convergences: The Accidental history of the Net." [ELMS]

FRIDAY FEBRUARY 4

RECITATION - Due: Nothing!
Assigned: Paper Topic Proposal; Group Work Contract Lecture: Brainstorming Your Research Topic

DISCUSSION BOARD - Applying Franklin to Our Readings

WEEK 3: INFRASTRUCTURES AND AFFORDANCES

MONDAY FEBRUARY 7

READINGS

-Adam Satariano, et al. "How the Internet Travels Across the Ocean." New York Times. (2019) https://www.nytimes.com/interactive/2019/03/10/technology/internet-cables-oceans.html
-David Brown. "Ten Facts About Undersea Cables." Mental Floss. (2015) https://www.mentalfloss.com/article/60150/10-facts-about-internetsundersea-cables
-Ingrid Burrington. "Seeing Networks in New York City." http://seeingnetworks.in/nyc/

VIEWING

-Ben Mendelsohn, "Bundled, Buried, and Behind Closed Doors." (2012) 10 mins, 5 secs. https://vimeo.com/30642376

WEDNESDAY FEBRUARY 9

READINGS

-Ingrid Burrington, "A Surreal Trip to a Domain Names Conference." (2017) https://www.theatlantic.com/technology/archive/2017/02/domain-names-dot-horse/516438/
-Pew Research Center, "Mobile Technology and Home Broadband 2019." https://www.pewresearch.org/internet/2019/06/13/mobile-technology-and-home-broadband-2019/

-Claire Cain Miller, "Why the US Has Fallen Behind in Internet Speed and Affordability." New York Times. (2014) https://www.nytimes.com/2014/10/31/upshot/why-the-us-has-fallen-behind-in-internet-speed-and-affordability.html

VIEWING
-Vox Media, "How Does the Internet Work? Glad You Asked." (2020) 19 mins, 33 sec. https://www.youtube.com/watch?v=TNQsmPf24go

FRIDAY FEBRUARY 11

RECITATION - Due: Proposal and Preliminary Research Plan, Group Work Contract
Assigned: Outside Infrastructure Hunt

WEEK 4: ENVIRONMENTAL IMPACTS

MONDAY FEBRUARY 14

READINGS
-Ingrid Burrington, "A Rare and Toxic Age," *Increment*. (2018) https://increment.com/energy-environment/a-rare-and-toxic-age/
-Ingrid Burrington. "What Is The Environmental Impact of a Netflix Binge." *The Atlantic*. (2015) https://www.theatlantic.com/technology/archive/2015/12/there-are-no-clean-clouds/420744/

WEDNESDAY FEBRUARY 16

READINGS
-Tatiana Schlossberg, "Silicon Valley is One of the Most Polluted Places in the Country," *The Atlantic* (2019) www.theatlantic.com/technology/archive/2019/09/silicon-valley-fullsuperfund-sites/598531/
-"The Superfund Sites of Silicon Valley," *The New York Times* (2018) https://www.nytimes.com/2018/03/26/lens/the-superfund-sites-of-silicon-valley.html
-Cam Simpson, "American Chipmakers Had a Toxic Problem. Then They Outsourced It." *Bloomberg Businessweek*. (2017) https://www.bloomberg.com/news/features/2017-06-15/american-chipmakers-had-a-toxic-problem-so-they-outsourced-it

FRIDAY FEBRUARY 18

RECITATION - Assigned: Preliminary Bibliography
Due: Outside Infrastructure Hunt

WEEK 5: DATA

MONDAY FEBRUARY 21

READINGS
-James C. Scott, "State Projects of Legibility and Simplification." Seeing Like A State. (1998) pp 9-53

WEDNESDAY FEBRUARY 23

READINGS
-Dan Bouk (2017) "The History and Political Economy of Personal Data over the Last Two Centuries in Three Acts"
https://www.journals.uchicago.edu/doi/10.1086/693400
-Josh Lauer. "Introduction." Creditworthy. (2017). [ELMS]

FRIDAY FEBRUARY 25

RECITATION - Due: Preliminary Bibliography
Assigned: Field Work Report

WEEK 6: DATA AND ALGORITHMS

MONDAY FEBRUARY 28

READINGS
-Charles Duhigg, "How Companies Learn Your Secrets." New York Times. (2012)
https://www.nytimes.com/2012/02/19/magazine/shopping-habits.html
-Virginia Eubanks (2018) "A child abuse prediction model fails poor families"
https://www.wired.com/story/excerpt-from-automating-inequality/

LISTENING
-Reply All, "The Crime Machine Part 1." (2018)
https://gimletmedia.com/shows/reply-all/o2hx34

WEDNESDAY MARCH 2

READINGS
-Alvaro Bedoya (2018) "A license to discriminate"
https://www.nytimes.com/2018/06/06/opinion/facebook-privacy-civil-rights-data-huawei-cambridge-analytica.html
-Larry Smith (2018) "Former Baltimore police officer unloads on the Department's gang database" https://theappeal.org/former-baltimore-police-officer-unloads-on-departments-gang-database/

LISTENING
-Reply All, "The Crime Machine, Part 2." (2018)
https://gimletmedia.com/shows/reply-all/n8hwl7/128-the-crime-machine-partii

VIEWING
-ProPublica, *Breaking the Black Box: Episodes 1-4*. All episodes found here:
https://www.propublica.org/article/breaking-the-black-box-what-facebook-knows-about-you

FRIDAY MARCH 4

RECITATION - Due: Preliminary Bibliography

WEEK 7: ECONOMICS OF THE INFORMATION SOCIETY

MONDAY MARCH 7

READINGS

-Jill Lepore. "This Disruption Machine." *The New Yorker*. (2014)

-Ethan Zuckerman. "The Internet's Original Sin." *The Atlantic*. (2014)
www.theatlantic.com/technology/archive/2014/08/advertising-is-theinternets-original-sin/376041/

VIEWING

-Mariana Mazzucato. "Government: Investor, Risk Taker, Innovator." (2013)
https://www.ted.com/talks/mariana_mazzucato_government_investor_risk_taker_innovator

WEDNESDAY MARCH 9

READINGS

-Alex Rosenblat, "When Your Boss is an Algorithm," *New York Times*. (2018).
https://www.nytimes.com/2018/10/12/opinion/sunday/uber-driver-life.html

-Casey Newton. "The Trauma Floor." *The Verge*. (2019)
https://www.theverge.com/2019/2/25/18229714/cognizant-facebook-contentmoderator-interviews-trauma-working-conditions-arizona

FRIDAY MARCH 11

RECITATION

- Due: Field Work Report, Personal Data Tracking Activity

Assigned: Outline

WEEK 8: COPYRIGHT, ETC

MONDAY MARCH 14

READINGS

-Daniel Cohen and Roy Rosenweig. "Owning the Past: A Brief History of Copyright." http://chnm.gmu.edu/digitalhistory/copyright/1.php (skim the other sections!)

-Klint Finley, "The WIRED Guide to Open Source Software," (2019) *WIRED*.
https://www.wired.com/story/wired-guide-open-source-software/

WEDNESDAY MARCH 16

READINGS

- Electronic Frontier Foundation. "A Guide to YouTube Removals."
https://www.eff.org/issues/intellectual-property/guide-to-youtube-removals

-Cory Doctorow. "I Can't Let You Do That, Dave." *Communications of the ACM*. (2015) https://cacm.acm.org/magazines/2015/12/194639-i-cant-let-you-do-that-dave/fulltext

FRIDAY MARCH 18

RECITATION - Due: Outline
Assigned: TK

WEEK 9: NO CLASS, SPRING BREAK [MARCH 20-27]

WEEK 10: HACKING AND HACKERS

MONDAY MARCH 28

READINGS
-Ron Rosenbaum. "Secrets of the Little Blue Box." *Esquire*. (1971)
https://classic.esquire.com/article/1971/10/1/secrets-of-the-blue-box
-Stephen Levy. "The Tech Model Rail Road Club." *Wired*. (1984) [ELMS]

WEDNESDAY MARCH 30

READINGS
-M. R. Sauter, "Kevin Mitnick, the *New York Times*, and the Media's Conception of the Hacker." (2019) [ELMS]
-Bruce Sterling, "The Digital Underground." *The Hacker Crackdown*. (1992) [ELMS]
-John Perry Barlow (1996) "A Declaration of the Independence of Cyberspace"
https://www.eff.org/cyberspace-independence

FRIDAY APRIL 1

RECITATION - Due: TK
Assigned: TK Lecture: TK

WEEK 11: SECURITY

MONDAY APRIL 4

READINGS
-Duo Security. "History of Vulnerability Disclosure 1853-2015"
https://duo.com/labs/research/history-of-vulnerability-disclosure
- Stephen Levy, Crypto: How Code Rebels Beat the Government Saving Privacy in the Digital Age. (2001) [ELMS]

WEDNESDAY APRIL 6

READINGS
-Rebecca Slayton. "The Paradoxical Authority of the Certified Ethical Hacker." (2017) https://limn.it/articles/the-paradoxical-authority-of-the-certified-ethical-hacker/

FRIDAY APRIL 8

RECITATION - Due: TK

Assigned: First Draft

WEEK 12: PRIVACY AND SURVEILLANCE

MONDAY APRIL 11

READINGS

-Simone Browne (2012) "Race and Surveillance" [ELMS]

-Steve Mann (2013) "Veillance and Reciprocal Transparency: Surveillance versus Sousveillance, AR Glass, Lifeglogging, and Wearable Computing" http://wearcam.org/veillance/part1.pdf

WEDNESDAY APRIL 13

READINGS

-Helen Nissenbaum (2011) "A Contextual Approach to Privacy Online." https://www.amacad.org/publications/daedalus/11_fall_nissenbaum.pdf

-Daniel Solove (2011) "Why privacy matters even if you have 'nothing to hide'" https://www.chronicle.com/article/Why-Privacy Matters-Even-if/127461

-Tara Adiseshan and Jen Kagan (2018) "A brief introduction to cookies" https://recompilermag.com/issues/issue-7/a-brief-introductionto-cookies/

FRIDAY APRIL 15

RECITATION - Due: none

Assigned: none

WEEK 13: WHEN THINGS DON'T WORK

MONDAY APRIL 18

READINGS

Readings (pick one case study and read/view all material)

CASE STUDY: THE GRID

-Gretchen Bakke. "Things Fall Apart." *The Grid.* (2016) [ELMS]

- David Nye. "Rolling Blackouts." *When the Lights Went Out.* (2010). [ELMS]

-Alex Gibney. *The Smartest Guys In The Room*. aprox. 2 hours. (2005)

CASE STUDY: INTERFACES+ CONTROL SYSTEMS

-T. Christian Miller, et al. "Collision Course." *ProPublica*. (2019) https://features.propublica.org/navy-uss-mccain-crash/navy-installed-touch-screen-steering-ten-sailors-paid-with-their-lives/

-Maureen Tkacik. "Crash Course: How Boeing's Managerial Revolution Created the 737 Max Disaster." *The New Republic.* (2019) https://newrepublic.com/article/154944/boeing-737-max

WEDNESDAY APRIL 20

READINGS
Readings (read both case studies)
CASE STUDY: THE DYN DNS OUTAGE/MIRAI BOTNET
-Wikipedia. "2016 Dyn Cyberattack." https://en.wikipedia.org/wiki/2016_Dyn_cyberattack
-William Turton. "This Is Why Half the Internet Was Shut Down Today." *Gizmodo* (2016) https://gizmodo.com/this-is-probably-whyhalf-the-internet-shut-down-today-1788062835
-Tim Greene. *Network World.* (2016) "How the DYN DDOS Attack Unfolded." https://www.networkworld.com/article/3134057/how-thedyn-ddos-attack-unfolded.html
-Brian Krebs. "Who is Anna-Senpai the Mirai Worm Author?" (2017) https://krebsonsecurity.com/2017/01/who-is-anna-senpai-the-mirai-worm-author/
-US Justice Dept. "Justice Department Announces Charges and Guilty Pleas In Three Computer Cases." https://www.justice.gov/usao-nj/pr/justice-department-announces-charges-and-guilty-pleas-three-computer-crime-cases

CASE STUDY: NOTPETYA
-Andy Greenberg. "The Untold Story of NotPetya, the Most Devastating Cyberattack in History." *Wired* (2018) https://www.wired.com/story/notpetya-cyberattack-ukraine-russia-code-crashed-the-world/

FRIDAY APRIL 22
RECITATION - Due: First Draft
Assigned: TK

WEEK 14: ONLINE COMMUNITIES

MONDAY APRIL 25
READINGS
-Nancy Baym. "Communities and Networks." *Personal Connections in the Digital Age.* (2015). [ELMS]

WEDNESDAY APRIL 27
READINGS
-Joseph Bernstein, "Alienated, Alone, and Angry: What the Digital Revolution Really Did To Us." *Buzzfeed.* (2019) https://www.buzzfeednews.com/article/josephbernstein/in-the-2010s-decade-we-became-alienated-by-technology
-Finn Brunton, "Ready for the Next Message 1971-1994," *Spam: A Shadow History of the Internet.* MIT Press. 2013. [ELMS]

-Noah Davis. "Digital Apocalypse: Living Through the Death of Virtual Worlds." *The Verge*. (2012) https://www.theverge.com/2012/12/20/3776210/electric-funeral-death-of-mmo

FRIDAY APRIL 29

RECITATION - Due: TK

Assigned: Final Draft; Peer Reviews

WEEK 15: POLITICAL CHANGE PT 1

MONDAY MAY 2

READINGS

- Gabriella Coleman, "Project Chanology - I Came for the Lulz but Stayed for the Outrage." *Hacker Hoaxer Whistleblower Spy*. Verso. 2014. [ELMS]

-M.R. Sauter. "DDOS and Civil Disobedience in Historical Context." *The Coming Swarm*. Bloomsbury. 2014. [ELMS]

WEDNESDAY MAY 4

READINGS

-M.R. Sauter. "Blockades and Blockages: DDOS as Direct Action." *The Coming Swarm*. Bloomsbury. 2014. [ELMS]

-Zeynep Tufekci. "Technology and People." *Twitter and Tear Gas: The Power and Fragility of Networked Protest*. [ELMS]

FRIDAY MAY 6

RECITATION

WEEK 16: POLITICAL CHANGE PT 2 <LAST WEEK>

MONDAY MAY 9

READINGS

-Charlotte Mitchell. "Internet Blackouts: The Rise of Government Imposed Shutdowns." Al Jazeera. 16 June 2019. https://www.aljazeera.com/features/2019/6/16/internet-blackouts-the-rise-of-government-imposed-shutdowns

-Ronald Deibert and Rafar Rohozinski. "Control and Subversion in Russian Cyberspace." *Access Controlled: The Shaping of Power, Rights, and Rule in Cyberspace*. MIT Press. 2010. [ELMS]

- Lucie Greene. "The New Power Map," "Government and Silicon Valley." *Silicon States*. Counterpoint. 2018. [ELMS]

FRIDAY MAY 13 <FINAL PAPERS + PEER REVIEWS DUE>