Computing, Power, and Imagination in the United States after 1900
Spring 2026 / History 38506 /CRN 40757 / 3 credits, in person
Prof. Aaron Mendon-Plasek

Catalog Course Description
This course examines the twentieth- and twenty-first-century histories of calculating techniques, computing infrastructures, and the uses of data quantification in the United States. Students will analyze how these practices shaped the articulation of social problems and justified particular historical forms of social order through debates about democratic representation, science, technology, equality, and justice.

Learning Outcomes
By the end of the course, students will be able to:

1. **Identify** key historical developments in computing techniques, infrastructures, and research practices in the United States after 1900, using primary and secondary sources.
2. **Analyze** how experts' use of quantitative methods shaped systems of socioeconomic classification and influenced debates over democratic representation, science, technology, equality, and justice.
3. **Apply** historical and digital tools to organize, interpret, and visualize historical data within its historical, technological, and social contexts.
4. **Communicate** original evidence-based historical arguments in oral and written formats, integrating qualitative and quantitative analysis to address complex historical questions.

Grading & Course Assessment
Continuous Assessment
weekly practicum: 20%
reading responses: 10%
participation: 20%

Research Projects
Midterm Project: 15%
Lightning Talk: 5%
Research Paper/Project: 30%
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course grade: 100%

Grading Scale
A+: 100.0%-97.0%; A: 96.99%-93.0%; A-:92.99%-90.0%; B+: 89.99%-87.0%; B: 86.99%-83.0%; B-:82.99%-80.0%; C+:79.99%-77.0%; C:76.99%-73.0%; C-:72.99%-70.0%; D+:69.99%-67.0%; D:66.99%-63.0%; D-:62.99%-60.0%; F:59.99%-0%

Learning Resources, Technology, & Texts
Required texts: All required course readings are listed in the course schedule below and will be made available as PDFs. You are responsible for printing a paper copy of each PDF and bringing it with you to class. Failure to bring a printed copy with you will negatively impact your participation grade.

Required technology & software: (1) A working laptop running Windows, MacOS, or Linux; (2) a working python 3 installation (e.g., Anaconda); and (3) a word processing program (e.g., MS Word, LibreOffice, etc.).

Course Schedule

Please note that this syllabus will change based on class needs. Assigned readings for each week should be completed in advance of the class meeting in which we discuss them.

Week 1 (Jan 13th & 15th): Introductions

Readings

- Ian Hacking. *Historical Ontology*, pp. 99-114.
- Dan Bouk. *Democracy's Data*, chapter 3.

Part I: Early 20th century solutions to social questions

Week 2 (Jan 20th & 22nd): How do nations know themselves? How do states, towns, and individuals?

Readings

- Alain Desrosières. *The Politics of Large Numbers,* pp. 1-13
- Ronan Farrow. "How Democracies Spy on Their Citizens."

Week 3 (Jan 27th & 29th): Infrastructures of Individual Identification, Attribution, & the Self in the early 20th century

Readings

- Josh Lauer. *Creditworthy: a history of consumer surveillance and financial identity in America*, chapter 5 excerpts.

Week 4 (Feb 3rd & 5th): Pre-WWII Strategies for Making Up Data for Reform and Prejudice [public health, immigration and nationalism, eugenics, and citizenship]

Readings

- Samuel Roberts Jr. *Infectious Fear: Politics, Disease, and the Health Effects of Segregation,* chapter 2 excerpts.
- Mae Ngai. *Impossible Subjects: Illegal Aliens and the Making of Modern America,* pp. 21-55.

Week 5 (Feb 12th / no class Feb 10th): Social Description and Citizenship

Readings

- Theodore Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*, chapter 2.
- Sarah Igo. *The Averaged American: Surveys, Citizens, and the Making of the Mass Public,* pp. 103-118.

Part II: Cold War knowledge: social and scientific orders

Week 6 (Feb 17th & 19th): Knowledge Production, Cold War Social Sciences, & Democracy

Readings

- Joy Rohde, *Armed with Expertise: The militarization of American Social Research,* chapter 2 excerpts.
- Steven Shapin, *The Scientific Life: A Moral History of a Late Modern Vocation,* chapter 6 excerpts.

Week 7 (Feb 24th / no class Feb 26th): Computing as Early Cold War Technologies of Trust
Readings
- Jamie Cohen-Cole, *The Open Mind: Cold War Politics and the Sciences of Human Nature,* pp. 35-45
- Donald Mackenzie. *Mechanizing Proof: Computing, Risk, and Trust.* Cambridge and London: MIT Press, 2001: pp. 63-86.

Week 8 (Mar 3rd & 5th): Artificial Intelligence and (Political) Knowledge
Readings
- Pamela McCorduck. *Machines Who Think,* pp. 156-170.
- Paul Edwards. *The Closed World: Computers and the Politics of Discourse in Cold War America,* pp. 246 - 256, 264-267.

Week 9 (Mar 10th & 12th): Interrogating data, Interrogating history
Readings
- Catherine D'Ignazio and Lauren Klein. *Data Feminism,* pp. 2-24.
- Lara Putnam. "Transnational and the Text-Searchable: Digitized Sources and the Shadows They Cast," pp. 377-387.

SPRING BREAK: March 16th – 21st

Week 10 (Mar 24th & 26th): Contingent Computing, Contingent Humans, Contingent Science
Readings
- Stephanie Dick. "Artificial Intelligence." (3 pages)
- Joseph November. *Biomedical computing: Digitizing life in the United States*, pp. 19-26; 29-42; 54-66.

Week 11 (Mar 31st & Apr 2nd): Early Machine Learning & Describing Dissent
Readings
- Oliver Selfridge. "Pattern Recognition and Modern Computers," pp 91-93.
- Joy Rohde. "Pax Technologica: Computers, International Affairs, and Human Reason in the Cold War," pp. 792-813.

Week 12 (Apr 7th & 9th): Democratic Infrastructure & Inventing Transparency
Readings
- Jennifer Light. *From Warfare to Welfare: Defense Intellectuals and Urban Problems in Cold War America,* chapter 6 excerpts.
- Michael Schudson, *The Rise of the Right to Know: Politics and the Culture of Transparency, 1945-1975,* chapter 6 excerpts.

Part III: Knowledge, Identity, and Judgment

Week 13 (Apr 14th & 16th): Search, Spam, and Crime as if they were the same problem, part I
Readings
- Finn Brunton. *Spam: A Shadow History of the Internet,* pp 155-161.
- Safiya Noble. *Algorithms of Oppression: How Search Engines Reinforce Racism,* pp 35-42.

Week 14 (Apr 21st & 23rd): Individual Agency, Institutional Memory, and Social Judgment
Readings
- Ian Hacking. *The Social Construction of What?* pp. 163-185.
- Virginia Eubanks. *Automating inequality: How high-tech tools profile, police, and punish the poor*, excerpts.

Weeks 15 (Apr 28th & 30th): Search, Spam, and Crime as if they were the same problem, part II
Readings
- Matthew Connelly. "Why you may never learn the truth about ICE." (1 page)
- Sarah Brayne. *Predict and Surveil: Data, Discretion, and the Future of Policing,* pp 56-60.

Weeks 16 (finals week, no classes): Finishing!
Research Project
- Final Paper Due

Assignments/Assessments

In-class participation, including quizzes and classroom groupwork

Each class you will be expected to (1) complete the required reading prior to our class discussion of the text as noted in the course schedule, (2) actively contribute to the classroom conversation using textually-grounded positions, (3) be able to refer to these readings in class, (4) participate in all in-class activities, and, if on zoom, (5) follow appropriate zoom etiquette. Your mere presence gives you a "C-"; providing useful contributions regularly in class and actively participating will give you a higher grade. I will grade your in-class participation three times during the semester as noted in the course schedule.

You may also do a variety of in-class activities and assessments, including group work and quizzes graded pass/fail or on a percent scale. **In-class quizzes may be given without prior notice.** All of these will be included in your participation grade. **While in class activities cannot be made-up, you can be excused from the activity by obtaining an "excused" absence.**

Reading Responses

The purpose of the reading responses (RRs) is not to summarize the ideas of the readings/viewings, but use these RRs to explore an idea, theme, question, or problem you identify. Starting the second week of class, RRs for each week's readings will be due on noon on Fridays. You will submit all your RRs via Brightspace.

RRs will be graded as follows: check plus = 100%, check = 85%, check minus = 70%, or 0% = didn't do.

There will be approximately eight responses assigned during our course. I will drop one reading response with the lowest grade, and you will be graded on the remaining responses.

Your reading response should aim to (1) identify an idea/theme/question/concern discussed in the course materials assigned for that week; (2) use your discussion of the texts to change your understanding of the ideas/texts/themes you identify; and (3) arrive at a new understanding, insight, or position (e.g., a new question, insight, concern, framing, etc.) as a consequence of your discussion. Two important caveats: first, your discussion should always, in one way or another, touch upon one or more of the themes of the course; and, second, your discussion should directly and *explicitly* engage with the ideas presented in the course materials.

You should aim to interweave all the previous week's readings in your reading response. **However, depth of ideas will always be preferred to breadth of sources discussed. Responses should be at least one page but no more than two.** If you go shorter than this, your grade may be penalized.

Practicums (In-Class and Take-home)
Most class meetings we will identify a quantitative method or technique discussed in a primary or secondary source to understand the social, political, and technical concerns that made that form of quantification thinkable. We will reproduce the calculations, methods, and/or reasoning of a primary source in various in-class and take-home practicums to identify, contextualize, and critique the epistemological assumptions upon which the method depends. As you complete specific in-class tasks for each practicum, you will gain experience critically analyzing historical data sets and will submit proof-of-work for these at the end of each lesson to receive full credit for the practicum. Late submission of practicum proof-of-work is acceptable up to 24 hours after the practicum, but will incur a late penalty of one letter grade (i.e., 10% penalty). No proof-of-work will be accepted after 24 hours after the in-class practicum, and will be labeled a zero. Some practicums will be "take home" assignments: the same late submission policy for in-class work applies to take-home practicums.

Midterm Project: Critical Investigation of a Dataset
You will write a 4- to 6-page paper in which you pick a dataset and investigate it, including (1) examining the structure, contents, and provenance of the data and (2) critically interrogating how this data set is used in political, social, cultural, and institutional contexts. Be sure to describe and interrogate the practices, purposes, and uses pertaining to a dataset. You should also discuss the relationships between data creation, practices of meaning making, and power. You will be evaluated on the profundity, style, and substance of your exegesis and your arguments. Your audience for this paper is both your classmates and your instructor, but need not be limited to these people. Please do see me during office hours if you want to discuss your paper argument.

Required Office Hour Meeting
Students are expected to work on their research project throughout the course. Students are **required** to meet with me during my office hours at least once to discuss their research project topic **before submitting their midterm project**. This required office hour meeting will contribute to a student's participation grade.

Final Project: Arguing History, Arguing Data
research paper: The topic and argument of your paper is up to you, and, ideally, will touch on questions of concern in your professional and/or personal life. Your paper must also engage with

the subjects, questions, or themes from our course. We've examined how individuals and institutions made social distinctions and judgments about people in the US in the 20th century. We've also explored different ideas about what it means to do history, including the different ways that ideas about data have constrained and facilitated different stories about possibility and probability. Your paper need not address these particular questions, but should engage with the larger themes and/or questions of the course as well as the relevant research communities. Your audience for this paper is both your classmates and your instructor, but should not be limited to these people. Your paper should be interesting to your audience, and should offer a new way to think about a question.

lightning talk: You will make a 5-minute video that will serve as a kind of "teaser trailer" for your paper. The video should (1) introduce the problem or question you are examining and how you see it fitting into the concerns of the class, (2) discuss the present state of your paper's argument and the relevant historical case (or cases) you are examining, and (3) address lingering questions or concerns you are continuing to explore as you refine your paper. Your fellow classmates will watch your video and offer comments that you will use to revise your paper.