

Science, Knowledge, & Democracy (Junior History Research Seminar)

Spring 2026 / History 39500 / CRN 23669 / 3 credits, in person

Prof. Aaron Mendon-Plasek

Catalog Course Description

Variable title seminar for history majors in their junior year intended to teach historical skills, including research in primary sources, analytical skills, and forming historical arguments. It is a writing-intensive course and counts as one of the major requirements.

Learning Outcomes

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

1. **Identify** how calculating techniques, material infrastructures, and research practices in the United States informed changing conceptions of democratic representation, identity, and technical progress.
2. **Interpret** empirical evidence within its historical, technological, and social contexts.
3. **Summarize** different scholarly debates pertaining to the role of quantification in the formation of social and political concepts
4. **Articulate** novel research questions and historical arguments that engage with historical scholarship
5. **Communicate** original evidence-based historical arguments in oral and written formats

Learning Resources, Technology, & Texts

Required texts: All course readings will be made available as PDFs in Brightspace. 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 affect your participation grade.

Required technology & software: (1) A working laptop running Windows, MacOS, or Linux; (2) Microsoft Word or LibreOffice; and (3) the Zotero plug-in for MS Word/LibreOffice.

Grading & Course Assessment

Continuous Assessment

research/reading journal: 12.5%

in-class participation: 17.5%

Projects

Annotated Bibliography (3-4 pgs): 15%

Primary Source Analysis (1000 words): 15%

Project Lightning Talk: 5%

Project Proposal (7000 words): 35%

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%

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): Math & Just Representation(s)

Readings/Materials

- Alma Steingart, “Democracy by Numbers”

Part I: Democracy as a Problem: Calculating Freedom / Knowing Citizens

Week 2 (Jan 20th & 22nd): Describing democracies / Remaking the world

Readings/Materials

- Dan Bouk, *Democracy’s Data: The Hidden Stories in the U.S. Census*, chap 5
- W. E. B. Du Bois, *The Souls of Black Folk*, chap VI

Week 3 (Jan 27th & 29th): Describing People Creating Publics, Creating Nations

Readings

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

Week 4 (Feb 3rd & 5th): Narrating empires narrating progress / transnational explanations

Readings

- Thomas Bender, *A Nation among Nations*, chapter 4
- Priya Satia, *Time’s Monster*, introduction
- Lara Putnam. “Transnational and the Text-Searchable: Digitized Sources and the Shadows They Cast,” pp. 377-387

Week 5 (Feb 12th / no class Feb 10th): Imagining Privacy / Private Threats

Readings

- Sarah Igo. *The Known Citizen: A History of Privacy in Modern America*, chap 4

Week 6 (Feb 17th & 19th): Who Watches the Watchers

Readings

- Matthew Connelly, *The Declassification Engine*, excerpts
- Eric Foner, *Our Fragile Freedoms*, “The Electoral College”
- Michael Schudson, *The Rise of the Right to Know: Politics and the Culture of Transparency, 1945-1975*, chapter 6 excerpts

Part II: Calculating Infrastructures: Inventing Creativity, Scientists, Citizens

Week 7 (Feb 24th / no class Feb 26th): Computation, Competition, and Anti-Trust

Readings

- Gerardo Con Díaz, *Software Rights: How Patent Law Transformed Software Development*, excerpts.

Week 8 (Mar 3rd & 5th): Cold War Social Sciences

Readings

- Jamie Cohen-Cole, *The Open Mind: Cold War Politics and the Sciences of Human Nature*, pp. 35-45
- Joy Rohde, *Armed with Expertise: The militarization of American Social Research*, chapter 2 excerpts.

Week 9 (Mar 10th & 12th): (Scientific) Progress and Its (Disunified) Critics

Readings

- Kuhn, "Structure of Scientific Revolutions" excerpt
- Peter Galison, *Image and Logic*, chap 9 ("The Trading Zone: Coordinating Action and Belief")
- Steven Shapin, *The Scientific Life: A Moral History of a Late Modern Vocation*, chapter 6 excerpts.

SPRING BREAK: March 16th – 21st

Week 10 (Mar 24th & 26th): Inventing data

Readings

- Catherine D'Ignazio and Lauren Klein. *Data Feminism*, pp. 2-24.
- Paul Edwards, *A Vast Machine*, excerpts.

Week 11 (Mar 31st & Apr 2nd): Predicting Problems

Readings

- Joy Rohde. "Pax Technologica: Computers, International Affairs, and Human Reason in the Cold War," pp. 792-813.
- Erickson et al., *How Reason Almost Lost Its Mind*, excerpts
- Donald Mackenzie. *Mechanizing Proof: Computing, Risk, and Trust*, pp. 63-86.

Week 12 (Apr 7th & 9th): Warfare/Welfare

Readings

- Jennifer Light. *From Warfare to Welfare: Defense Intellectuals and Urban Problems in Cold War America*, chapter 6 excerpts.
- Mary Dudziak, *Cold War Civil Rights*, chap 5.

Part III: Classification, Identity, & 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*, excerpts.

Weeks 15 (Apr 28th & 30th): Search, Spam, and Crime as if they were the same problem, part II

Readings

- Sarah Brayne. *Predict and Surveil: Data, Discretion, and the Future of Policing*, pp 56-60.
- Elizabeth Hinton, *From the War on Poverty to the War on Crime*, chap 5.

Weeks 16 (finals week, no classes): Finishing!

- 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.**

Research/Reading Journal

Being able to write well, including the ability to identify and summarize complex ideas in a concise, accurate, and compelling manner, is vital to your success as a historian. Weekly journal writing will give you a valuable opportunity to improve while also giving you experience with placing the ideas in our readings into conversation with your own concerns. Starting the second week of class, you will write a journal entry (min. 1 page, single-spaced, 12pt-times) each week in which you do the following:

- 1) identify, summarize, and interrogate an argument from one or more of the readings discussed that week;
- 2) use your discussion of the text(s) to challenge or complicate your understanding of an idea/theme/concern of historical interest to you (and that pertains to the course themes).

In addition to being assessed on how successfully you meet these objectives, you will be graded on quality of your commentary (e.g., is it engaging? cogent? incisive?). You should aim to interweave all the previous week's readings in your weekly reflections. **However, depth of ideas will always be preferred to breadth of sources discussed.** Please be sure to provide citations using the 18th ed. Chicago notes-bibliography style.

Primary Source Analysis

This is a 1000-word narrative report (12pt-times, double-spaced) examining a primary source you will discover and that is related to a historical question you will select. This assignment will give you practice locating relevant primary sources as well as revising a historical question through engagement with a primary source. Your job is to learn everything you can about the source's provenance. Who made it and for what purpose? How was it used (or how does it continue to be used)? What political or professional institutions contributed to its development? Where can the

source be found? How did it get there? How can other historians find it? Who funded the creation of it? How was its creation justified and by who? Where and when was it created? Who were the different interested parties involved in its creation? Was there a particular scope or context for its use? Depending on the source (and your question), you may not be able to find out all the information you want—but you should be able to explain in detail the who, what, when, where, and why of the source.

Annotated Bibliography

You will identify three primary and/or secondary sources that are important to your research question and will provide commentary for each source, including but not limited to pertinent information such as author information, arguments, and other information relevant to your research question. You will be graded, in part, by how successful you are in explicating the relationship between your sources and your research question.

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 annotated bibliography**. This required office hour meeting will contribute to a student's participation grade.

Research Project Proposal

research project proposal paper (7000 words): The 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 includes both your classmates and your instructor, but should not be limited to these people. Your proposal must also explicitly engage with contemporary historical scholarship.

lightning talk: You will give a 5-minute talk in class that will serve as a kind of "teaser trailer" for your paper. The talk 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 project proposal arguments 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 project. Your fellow classmates will offer comments that you will may use to revise your paper.