History 39500 — Science, Knowledge, & Democracy

Junior History Research Seminar (Spring 2026)

CRN: 23669
Credits: 3
Format: In-person
Instructor: Prof. Aaron Mendon-Plasek

Catalog Course Description

A variable-title junior seminar for history majors focused on building historical skills:

- Research in primary sources
- Analytical and interpretive methods
- Constructing historical arguments
- Intensive academic writing

This course fulfills a major requirement and is **writing-intensive**.

Learning Outcomes

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

1. Identify how calculating techniques, infrastructures, and research practices shaped changing ideas about democracy, representation, identity, and technical progress in the United States.
2. Interpret empirical evidence in its historical, technological, and social contexts.
3. Summarize major scholarly debates about quantification and its role in forming social and political concepts.
4. Articulate novel research questions and historical arguments grounded in scholarship.
5. Communicate original, evidence-based historical arguments in written and oral formats.

Learning Resources, Technology, and Texts

Required Readings

All readings will be provided **as PDFs on Brightspace**.
Students must **print all readings** and bring paper copies to class.
Not bringing printed materials will lower the participation grade.

Required Technology

You must have:

1. A working laptop (Windows, MacOS, or Linux)
2. **Microsoft Word** or **LibreOffice**
3. **Zotero** with the Word/LibreOffice plug-in

Grading & Course Assessment

Continuous Assessment (30%)

Component	Weight
Research/Reading Journal	12.5%
In-class Participation	17.5%

Projects (70%)

Component	Weight
Annotated Bibliography (3–4 pages)	15%
Primary Source Analysis (1000 words)	15%
Lightning Talk	5%
Final Research Project Proposal (7000 words)	35%

Total Course Grade: 100%

Course Schedule

Assigned readings must be completed **before** the class meeting for which they are listed. This schedule may shift based on class needs.

Week 1 (Jan 13 & 15)

Math & Just Representation(s)

Reading:

- Alma Steingart, "Democracy by Numbers"

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

Week 2 (Jan 20 & 22)

Describing Democracies / Remaking the World

Readings:

- Dan Bouk, *Democracy's Data*, Ch. 5
- W.E.B. Du Bois, *The Souls of Black Folk*, Ch. VI

Week 3 (Jan 27 & 29)

Describing People, Creating Publics

Readings:

- Sarah Igo, *The Averaged American*, pp. 103–118

- Theodore Porter, *Trust in Numbers*, Ch. 2

Week 4 (Feb 3 & 5)

Narrating Empires, Narrating Progress

Readings:

- Thomas Bender, *A Nation Among Nations*, Ch. 4
- Priya Satia, *Time's Monster*, Introduction
- Lara Putnam, "Transnational and the Text-Searchable," pp. 377–387

Week 5 (Feb 12; no class Feb 10)

Imagining Privacy / Private Threats

Reading:

- Sarah Igo, *The Known Citizen*, Ch. 4

Week 6 (Feb 17 & 19)

Who Watches the Watchers?

Readings:

- Matthew Connelly, *The Declassification Engine*, excerpts
- Eric Foner, "The Electoral College," in *Our Fragile Freedoms*
- Michael Schudson, *The Rise of the Right to Know*, Ch. 6 excerpts

Part II: Calculating Infrastructures — Scientists, Citizens, Creativity

Week 7 (Feb 24; no class Feb 26)

Computation, Competition, and Anti-Trust

Reading:

- Gerardo Con Díaz, *Software Rights*, excerpts

Week 8 (Mar 3 & 5)

Cold War Social Sciences

Readings:

- Jamie Cohen-Cole, *The Open Mind*, pp. 35–45
- Joy Rohde, *Armed with Expertise*, Ch. 2 excerpts

Week 9 (Mar 10 & 12)

(Scientific) Progress and Its Critics

Readings:

- Thomas Kuhn, *Structure of Scientific Revolutions*, excerpt
- Peter Galison, *Image and Logic*, Ch. 9
- Steven Shapin, *The Scientific Life*, Ch. 6 excerpts

Spring Break: March 16–21

Week 10 (Mar 24 & 26)

Inventing Data

Readings:

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

Week 11 (Mar 31 & Apr 2)

Predicting Problems

Readings:

- Joy Rohde, "Pax Technologica," pp. 792–813

- Erickson et al., *How Reason Almost Lost Its Mind*, excerpts
- Donald Mackenzie, *Mechanizing Proof*, pp. 63–86

Week 12 (Apr 7 & 9)

Warfare / Welfare

Readings:

- Jennifer Light, *From Warfare to Welfare*, Ch. 6 excerpts
- Mary Dudziak, *Cold War Civil Rights*, Ch. 5

Part III: Classification, Identity, and Judgment

Week 13 (Apr 14 & 16)

Search, Spam, and Crime — Part I

Readings:

- Finn Brunton, *Spam*, pp. 155–161
- Safiya Noble, *Algorithms of Oppression*, pp. 35–42

Week 14 (Apr 21 & 23)

Agency, Memory, Social Judgment

Readings:

- Ian Hacking, *The Social Construction of What?*, pp. 163–185
- Virginia Eubanks, *Automating Inequality*, excerpts

Week 15 (Apr 28 & 30)

Search, Spam, and Crime — Part II

Readings:

- Sarah Brayne, *Predict and Surveil*, pp. 56–60
- Elizabeth Hinton, *From the War on Poverty to the War on Crime*, Ch. 5

Week 16 (Finals Week: No Class)

Final Research Project Due

Assignments & Assessments

In-Class Participation

Includes:

- Completing readings before class
- Contributing textually grounded discussion points
- Participating in activities and groupwork
- Occasional unannounced quizzes
- Zoom etiquette (if remote)

Participation is graded three times during the semester.

Unexcused absences may reduce participation credit.

Research / Reading Journal

Starting Week 2:

- One entry per week
- Minimum 1 page, single-spaced, 12pt Times
- Summarize and interrogate an argument from that week's readings
- Connect readings to a course theme or personal historical concern
- Provide citations in **Chicago Notes-Bibliography (18th ed.)**

Graded on clarity, depth, and quality of reflection.

Primary Source Analysis (1000 words)

A narrative report (double-spaced, 12pt Times) examining a primary source:

- Identify provenance
- Explain purpose, context, creation, funding, stakeholders
- Describe where it exists and how historians can access it
- Analyze political, institutional, or social relevance

You may not learn everything about the source—but must analyze available information thoroughly.

Annotated Bibliography (3–4 pages)

- Select three key sources (primary and/or secondary)
- Offer analytical commentary on each
- Show how each source connects to your research question

Required Office-Hour Meeting

You must meet with the instructor **before submitting the annotated bibliography**.
This meeting counts toward participation.

Final Research Project Proposal (7000 words)

Your proposal must:

- Articulate a historical argument on a topic of personal or professional interest

- Engage course themes and relevant scholarship
- Incorporate historical debates on quantification, data, representation, etc.
- Offer a new way of thinking about a question
- Be grounded in evidence and literature

Lightning Talk (5 minutes)

A short presentation introducing:

1. Your research question
2. Your developing argument
3. Cases or evidence you're examining
4. Questions or challenges you're still exploring

Classmates will provide feedback for revision.