History 38506 — Computing, Power, and Imagination in the United States after 1900

Spring 2026 • CRN 40757 • 3 Credits • In Person
Instructor: Prof. Aaron Mendon-Plasek

Catalog Course Description

This course surveys the 20th- and 21st-century histories of:

- Calculating techniques
- Computing infrastructures
- Data quantification practices

Students will analyze how experts used quantitative methods to define social problems and justify particular forms of social order. Course themes include:

- Democratic representation
- Scientific authority
- Technology and social control
- Equality, justice, and classification systems

Learning Outcomes

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

1. Identify major historical developments in computing techniques, infrastructures, and research practices in the United States after 1900.
2. Analyze how 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.
4. Communicate evidence-based historical arguments in oral and written formats that integrate qualitative and quantitative analysis.

Grading and Course Assessment

Continuous Assessment (50%)

Component	% of Final Grade
Weekly practicums	20%
Reading responses	10%
Participation	20%

Research Projects (50%)

Component	% of Final Grade
Midterm project	15%
Lightning talk	5%
Final research paper/project	30%

Total course grade: 100%.

Learning Resources, Technology, and Texts

Required Texts

All readings will be available as PDFs.
Students must print paper copies and bring them to class.
Not bringing a printed copy will affect participation grades.

Required Technology

You must have:

1. A working laptop (Windows, MacOS, or Linux)
2. A Python 3 installation (e.g., Anaconda)

3. A word processing program (MS Word, LibreOffice, etc.)

Course Schedule

Assigned readings must be completed before the class session listed.

Week 1 (Jan 13 & 15): Introductions

Readings:

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

Part I: Early 20th Century Solutions to Social Questions

Week 2 (Jan 20 & 22): How Nations Know Themselves

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

Week 3 (Jan 27 & 29): Identification and the Self

- Josh Lauer, *Creditworthy*, Ch. 5 excerpts

Week 4 (Feb 3 & 5): Data, Reform, and Prejudice

Topics: Public health, eugenics, immigration, nationalism
Readings:

- Samuel Roberts Jr., *Infectious Fear*, Ch. 2 excerpts
- Mae Ngai, *Impossible Subjects*, pp. 21–55

Week 5 (Feb 12; no class Feb 10): Social Description & Citizenship

- Theodore Porter, *Trust in Numbers*, Ch. 2
- Sarah Igo, *The Averaged American*, pp. 103–118

Part II: Cold War Knowledge—Social and Scientific Orders

Week 6 (Feb 17 & 19): Knowledge Production & Democracy

- Joy Rohde, *Armed with Expertise*, Ch. 2 excerpts
- Steven Shapin, *The Scientific Life*, Ch. 6 excerpts

Week 7 (Feb 24; no class Feb 26): Computing as Trust Technologies

- Jamie Cohen-Cole, *The Open Mind*, pp. 35–45
- Donald Mackenzie, *Mechanizing Proof*, pp. 63–86

Week 8 (Mar 3 & 5): Artificial Intelligence & Political Knowledge

- Pamela McCorduck, *Machines Who Think*, pp. 156–170
- Paul Edwards, *The Closed World*, pp. 246–256, 264–267

Week 9 (Mar 10 & 12): Interrogating Data and History

- Catherine D'Ignazio & Lauren Klein, *Data Feminism*, pp. 2–24
- Lara Putnam, "Transnational and the Text-Searchable," pp. 377–387

Spring Break: March 16–21

Week 10 (Mar 24 & 26): Contingent Computing

- Stephanie Dick, "Artificial Intelligence" (3 pages)
- Joseph November, *Biomedical Computing*, selections

Week 11 (Mar 31 & Apr 2): Early Machine Learning

- Oliver Selfridge, "Pattern Recognition and Modern Computers," pp. 91–93
- Joy Rohde, "Pax Technologica," pp. 792–813

Week 12 (Apr 7 & 9): Democratic Infrastructure & Transparency

- Jennifer Light, *From Warfare to Welfare*, Ch. 6 excerpts
- Michael Schudson, *The Rise of the Right to Know*, Ch. 6 excerpts

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Part III: Knowledge, Identity, and Judgment

Week 13 (Apr 14 & 16): Search, Spam, and Crime — Part I

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

Week 14 (Apr 21 & 23): Agency, Memory, Judgment

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

Week 15 (Apr 28 & 30): Search, Spam, Crime — Part II

- Matthew Connelly, "Why you may never learn the truth about ICE"
- Sarah Brayne, *Predict and Surveil*, pp. 56–60

Week 16 (Finals Week)

No class meetings
Final paper due

Assignments and Assessments

Participation (includes quizzes & groupwork)

To earn higher than a C-:

- Complete readings before class
- Contribute regularly to discussion
- Refer directly to texts
- Participate in activities and groupwork
- Follow Zoom etiquette (if applicable)

Participation will be graded **three times** during the semester.

Quizzes may be unannounced.
Missed in-class activities cannot be made up unless the absence is excused.

Reading Responses (RRs)

- Due Fridays at **12:00 PM (noon)** via Brightspace
- Grading:
  - ✓+ = 100%
  - ✓ = 85%
  - ✓– = 70%
  - 0 = not submitted

About eight responses; one lowest grade is dropped.

Responses (1–2 pages) should:

1. Identify a theme or question from the week's readings
2. Use the readings to rethink or reinterpret that theme

3. Arrive at a new insight or question
4. Engage directly with course materials
5. Show depth rather than breadth

Practicums (In-Class and Take-Home)

- Required regularly
- Must reproduce quantitative or analytical methods discussed in class
- Submit "proof-of-work" at end of class

Late Policy:

- Up to 24 hours late → –10%
- After 24 hours → 0

Midterm Project: Critical Investigation of a Dataset

4–6 pages analyzing:

- Structure, origins, and contents of a dataset
- How the dataset is used socially, politically, and institutionally
- How the data shapes meaning-making and power

Includes one required office-hours meeting.

Final Project: Arguing History, Arguing Data

Final Research Paper

- Engage major course themes
- Connect to your personal/professional interests
- Topic must be approved
- Audience: classmates + instructor
- Offer an original historical perspective

Lightning Talk (5-minute video)

Acts as a “teaser trailer” for your research paper:

1. Introduce your problem or question
2. Explain your argument and case
3. Discuss lingering concerns or paths forward

Classmates will give feedback for revision.