data: a social history

Online course | Rutgers University–New Brunswick

Instructor

Professor Jamie Pietruska
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Van Dyck 311
848.932.8544

Online office hours (via Zoom):
M 1:00 - 2:30 pm EST
Th 1:00 - 2:30 pm EST
or by appointment

Course info

This course meets SAS Core goals CCO & HST and counts toward the STEM in Society minor/certificate.
No prerequisites. No prior experience in History necessary.

Course tools

Book: Whitney Battle-Baptiste and Britt Rusert, eds., *W. E. B. Du Bois's Data Portraits: Visualizing Black America* (Princeton Architectural Press, 2018).
ISBN: 9781616897062. Available from the Rutgers University Barnes & Noble Bookstore and online retailers. On course reserve at the Alexander Library and freely accessible online as an ebook through Rutgers Libraries.

**Technology:** computer or tablet with Internet connection needed

Course description

What, if anything, is new about "Big Data" in the 21st century? How is data *made*, rather than simply "found"? This course examines the "datafication" of American society: how and why data became central to government, business, and daily life in the United States from the 19th century to the present day. From early American almanacs to 21st-century algorithms, data has been produced, managed, and used by public and private institutions as well as individuals to calculate, control, and predict myriad aspects of society. This course will uncover the surprising histories of census data and identity documents, credit scores and economic indicators, SAT scores and opinion polls, digital databases and data visualizations, weather forecasting and climate modeling, and baseball statistics and biometric data–and their implications for today's debates over security, privacy, democracy, and inequality in the age of "Big Data."

Course format

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- Online (asynchronous remote)

- Emphasis on multimedia sources (including video lectures, documents, maps, visual art, film, television clips, and podcasts)

- The success of our course will depend on your active and thoughtful engagement with the course material and each other, so please complete all the reading and activities for each module and share your ideas, comments, and questions with your classmates and the professor.
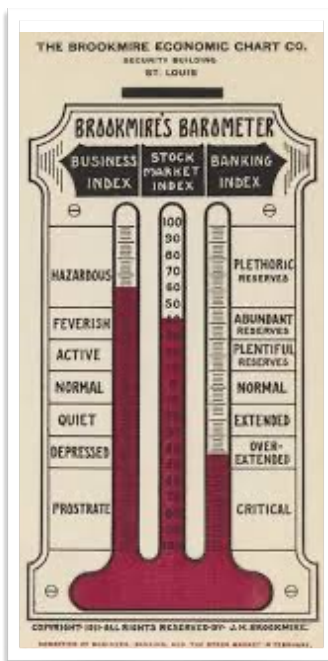
Big questions

1.) How and why have government and corporations expanded their administrative capacity to operate large-scale data infrastructures?

2.) How have government and commercial data infrastructures been used to monitor, manage, and control people and environments?

3.) How have technoscientific methods and tools for classifying, quantifying, sorting, and analyzing large-scale data sets changed over time?

4.) How has data been used to perpetuate racial, gender, and class inequities but also to fight against those inequities?

5.) What are the historical connections between data, selfhood, and political, economic, and social citizenship?

How to succeed in this course

1. Stay engaged

Our ongoing, collective conversation about the course material and reading is the single most important part of this course, and it depends on your engagement! Students in this course come from across the disciplines, and everyone brings a valuable perspective to the topics we will study. My hope is that we can take advantage of our online format to engage with the material and with each other in different ways than we would in a classroom setting.

This is an **asynchronous remote** course, which means that you can log on to our Canvas site each week to do your coursework at whatever days and times are best for you. (Due to the size of the class, we will *not* meet together for live online lectures at a specific time every week. But we will have some opportunities for *optional* real-time Zoom discussions throughout the semester.)

The course is organized into **15 weeks of online modules**, with typically 2 modules for each week. The new modules will be posted at the same time each week, and you will have **10 days to complete each module** on Canvas.

Each module will include short video lectures by the professor, a variety of multimedia sources, and opportunities for students to interact with each other and with the professor through collaborative activities, Canvas discussion forums, and other online platforms.

Another way to stay engaged in the course is to communicate by email with the professor and visit online Zoom office hours to clarify and deepen your understanding of the course material.

Your online engagement will be the basis of your citizenship/class participation grade, and it is highly unlikely that you will be able to succeed on paper assignments and exams without regular engagement with the weekly modules.

I understand that you may occasionally have to miss an assignment due to illness or other extenuating circumstances. In the event that you do fall behind in the course for whatever reason, please contact me by email as soon as possible so that I can help you catch up. **I understand that everyone is doing their best under the extremely adverse conditions of a global pandemic, and I will do everything I can to make this course as flexible as possible for anyone who needs accommodations.**
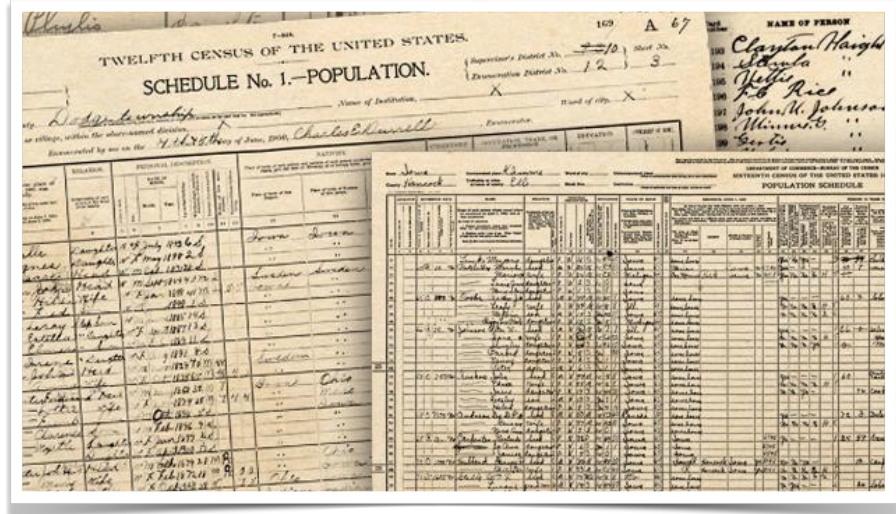
2. Do the reading

Reading assignments should be completed for each module as we will use the readings as the basis for online Canvas discussion and other interactive activities. **It is important to take notes in some way as you read** (e.g., underlining, highlighting, annotating, writing notes on a text's main arguments and themes, writing down questions, noting any confusing or seemingly contradictory aspects of the reading, etc.)

Required book: Whitney Battle-Baptiste and Britt Rusert, eds., *W. E. B. Du Bois's Data Portraits: Visualizing Black America* (Princeton Architectural Press, 2018), hardcover. ISBN: 9781616897062. Available for purchase from the Rutgers University Barnes & Noble Bookstore and online retailers. Also on course reserve at the Alexander Library and **freely accessible online** as an ebook through Rutgers Libraries.

Additional short readings will be posted on Canvas.
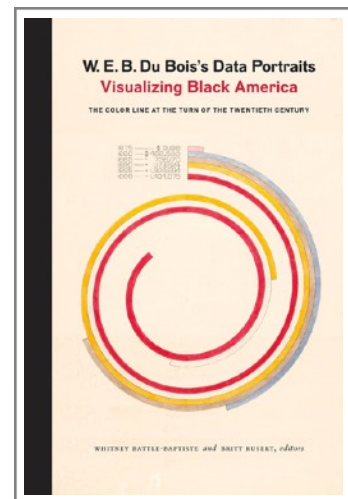
Assessment

15% **Paper #1**
3-page comparative analysis of 19th-century almanacs
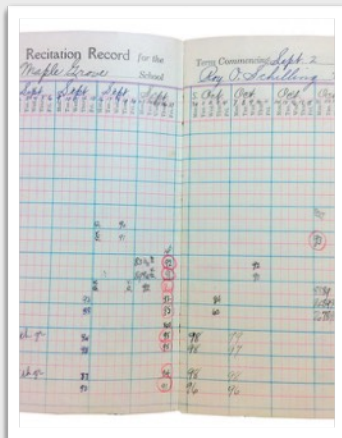
20% **Midterm exam**
(take-home)

25% **Paper #2**
5-page essay on postwar databases

20% **Final exam**
(take-home)

20% **Citizenship & online participation**

Both papers and both exams must be completed to pass the course.

3. Complete assignments on time

You will receive detailed instructions for each paper and exam well in advance of the due date. Read the instructions carefully and plan ahead. Come to online office hours to discuss your ideas with the professor. (Don't wait until the night before the paper is due to start the assignment!)

History Writing Tutors

Visit the History Writing Tutors online to get expert help with any stage of your writing process. Check out the [History Writing Tutors webpage](#) for more details and step-by-step writing guides covering everything from brainstorming to comma use.

Late submissions

There is a **rolling submission period of one week for both paper assignments and the take-home midterm exam** so that you can balance your workload for this course with your other courses and commitments.

Paper #1 is due the week of Sept. 28. You may submit it on Canvas anytime between Sept. 28 and Oct. 5.

The take-home midterm essay is due the week of Oct. 26. You may submit it to Canvas anytime between Oct. 26 and Nov. 2.

Paper #2 is due during the week of Nov. 23. You may submit it to Canvas anytime between Nov. 23 and Dec. 4 (a longer submission period that takes into account the Thanksgiving break).

If you need additional time to complete your work, please email the professor to arrange an extension.

Grading

Final course grades will be calculated according to the following scale, conforming to University policy that uses "+" but not "- "grades:

A　90% & above
B+　85-89%
B　80-84%
C+　75-79%
C　70-74%
D　60-69%
F　59% & below

• Our Canvas grade book will be updated regularly throughout the semester, so make sure to check your grades so that you know where you stand.

• If you would like to discuss your grades at any point, please make an appointment to speak with the professor via Zoom. *Please note that I do not discuss grades over email.*

• *There are no extra credit assignments in this course.*

Online discussion groups

Our weekly modules will offer you regular opportunities to engage with the material and each other through Canvas. Your participation will be assessed based on the quality and quantity of your contributions to your Canvas discussion group and other online platforms that we will use.

Online participation rubric	
A	Student participated meaningfully in every, or nearly every, Canvas group activity; offered comments and/or questions that reflected substantive engagement with the assigned material; and responded thoughtfully to the other students' contributions
B	Student excelled in most of the above ways, but fell short on 1 or 2 of the criteria (e.g., had more than a few instances of no participation, *or* about 1/3 of the time made comments that reflected only a superficial engagement with the assigned material)
C	Either the student excelled in some criteria but fell short in others (e.g., made frequent comments in Canvas group activities but comments were not relevant to the topic or did not reflect engagement with the assigned material), or the student performed merely adequately on all the above criteria (e.g., only sometimes participated in Canvas group activities)
D	Student did not meet most of the criteria overall, but occasionally did meet one of the above criteria
F	Student did not engage with the video lectures, assigned material, or Canvas group activities throughout the semester

4. Contribute to our intellectual community

Citizenship

The [Department of History's "Policy on Mutual Responsibilities and Classroom Etiquette"](#) states, "Our commitments to a strong learning community are expressed in many ways. Respectful professors convey their commitment to the discipline of history and their desire to share its delights and challenges. They are well prepared for class, provide students with clear goals and expectations, listen carefully to student questions and comments, and conscientiously evaluate their students' work. Respectful students bring a strong work ethic to the history courses that they select. They expect to attend the scheduled classes, to be on time, to be prepared for class, and to be attentive during class. A shared respect for the discipline of history and for one another as teachers and students of history is essential to the academic integrity of our program. We must all do our part to maintain an environment of openness and civility that encourages and honors the intellectual achievement represented by the discipline of history."

Each of you is a valuable member of our intellectual community this semester, and I trust that you will conduct yourselves accordingly. My goal is that our online class will be a space for thoughtful, sustained, and respectful engagement with the course material and with each other.

I trust that you will make your best effort to help us achieve this goal by doing the following:

• Keeping up with the weekly modules to the best of your ability

• Participating thoughtfully in online discussions and other class activities

• Working collaboratively and productively in your Canvas discussion group

20 percent of your course grade will be based on online participation & citizenship

5. Ask for help when you need it

I would like everyone to succeed in this course and am always happy to help however I can. Please don't hesitate to contact me with any questions or concerns as soon as they arise.

Contacting the professor

I am available during online office hours each week or by appointment. I check email regularly and will reply as soon as I can, typically within one business day. **In compliance with the Family Educational Rights and Privacy Act (FERPA), please use your Rutgers ScarletMail account (not a personal email account) to communicate with your professors and teaching assistants.** As the [Rutgers University Ethics and Compliance webpage](#) states, "All Rutgers University students, staff, and instructors are assigned a university managed email account to be utilized for purposes of official correspondence."

Student wellness resources [services provided remotely in Fall 2020]

Rutgers Universitywide COVID-19 Information
https://coronavirus.rutgers.edu/

Rutgers Learning Centers Remote Instruction
Learning remotely presents new challenges. For assistance with learning how to address these challenges, please consult the resources available here: https://rlc.rutgers.edu/remote_instruction

Rutgers Student Technology Resources
Please visit the [Rutgers Student Tech Guide](#) page for resources available to all students. If you do not have the appropriate technology for financial reasons, please email the Dean of Students deanofstudents@echo.rutgers.edu or complete the [contact form](#) for assistance. If you are facing other financial hardships, please visit the Office of Financial Aid at https://financialaid.rutgers.edu/.

Just In Case Web App
http://codu.co/cee05e
Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)
(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ http://health.rutgers.edu/medical-counseling-services/counseling/
CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professionals within Rutgers Health Services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / https://ods.rutgers.edu/

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

Scarlet Listeners

(732) 247-5555 / https://rutgers.campuslabs.com/engage/organization/scarletlisteners

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.

Report a Concern: http://health.rutgers.edu/do-something-to-help/

Basic Needs Security: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students for support. Also, if you are comfortable doing so, please notify the professor so that she can help however she can and connect you with campus resources.

Office of the Dean of Students   http://deanofstudents.rutgers.edu/
88 College Avenue
New Brunswick, NJ 08901
848-932-2300
deanofstudents@echo.rutgers.edu

Rutgers Student Food Pantry   http://ruoffcampus.rutgers.edu/food/
Operating with limited services and/or hours in Fall 2020
39 Union Street
New Brunswick, NJ 08901
848-932-5500
ruoffcampus@echo.rutgers.edu

Academic Integrity Policy

The foundation of this course and any scholarly endeavor is academic integrity. I fully expect that all students will adhere to principles of academic integrity in their work. You are responsible for understanding the [Rutgers University policies regarding academic integrity](#). Ignorance of these policies or the consequences for violations is not an acceptable excuse. All written work must be a student's own original work. **Collaboration on writing assignments (i.e., essays and take-home exams) is not permitted.** Any and all references to other sources within your own essays must be properly cited according to the bibliographic conventions of the [Chicago Manual of Style](#), which is available through the [Alexander Library](#) and online at the [Purdue Online Writing Lab](#).

If you have any questions about quoting, paraphrasing, or referring to the work of others, please ask! It is better to be safe than sorry—better to have too many citations than too few and thus run the risk of unintentional plagiarism. Any and all violations of academic integrity in this course will result in the formal consequences and disciplinary action that are outlined in the [Rutgers policies on academic integrity](#). I have a zero-tolerance policy for academic dishonesty and refer all violations directly to the [Office of Student Conduct](#).

Students with Disabilities

Rutgers, the State University of New Jersey abides by the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments (ADAA) of 2008, and Sections 504 and 508, which mandate reasonable accommodations be provided for qualified students with disabilities and accessibility of online information. If you have a disability and may require some type of instructional and/or examination accommodation, please contact the professor during the first week of the semester so that we can arrange accommodations. If you have not already done so, you will need to register with the [Office of Disability Services](#), Lucy Stone Hall, Livingston Campus, 54 Joyce Kilmer Ave., Suite A145. Phone: 848.445.6800   Online: https://ods.rutgers.edu/

Schedule

The professor reserves the right to modify the schedule (e.g., shortening or eliminating assignments) as warranted by the ongoing public health emergency or other unforeseen events.

Week 1: How to Think Historically about Data

Week of Sept 1
Module 1.1   Introductions and Course Overview

Course introduction: What is New/Not New about Big Data?

Rebecca Lemov, "Big data is people!," Aeon, June 16, 2016

Recommended
Elena Aronova, Christine von Oertzen, and David Seposki, "Introduction: Historicizing Big Data," *Osiris* 32 (2017): 1-17

Week 2: The Promise & Peril of Big Data in the 21st Century

Week of Sept 8
Module 2.1   Security/Privacy

Michal-Lev Ram, "Palantir Connects the Dots with Big Data," *Fortune*, March 9, 2016

Charles Duhigg, "How Companies Learn Your Secrets," *New York Times*, February 2, 2012

Janet Vertesi, "My Experiment Opting Out of Big Data Made Me Look Like a Criminal," *Time*, May 1, 2014

Sarah E. Igo, "The Beginnings of the End of Privacy," *Hedgehog Review* 17, no. 1 (2015): 18-29 [Canvas]

Recommended
Viktor Mayer-Schönberger and Kenneth Cukier, *Big Data: A Revolution That Will Transform How We Live, Work, and Think* (Houghton Mifflin Harcourt, 2013)

Module 2.2   Democracy/Inequality

Felipe Hoffa, "The democratization of big data is a big win for democracy," Google Cloud Platform blog, June 20, 2016

Dirk Helbing et al., "Will Democracy Survive Big Data and Artificial Intelligence?," Scientific American, February 25, 2017

Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (NYU Press, 2018), selections [Canvas]

Recommended
Andrew Guthrie Ferguson, *The Rise of Big Data Policing: Surveillance, Race, and the Future of Law Enforcement* (NYU Press, 2017)
Cathy O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (Penguin Random House, 2016)
Siva Vaidhyanathan, *The Googlization of Everything (And Why We Should Worry)* (University of California Press, 2011)

Week 3: Quantification in Indigenous, Colonial, & Early American Histories

Week of Sept 14
Module 3.1   Indigenous and Colonial Numeracy

Caitlin Rosenthal, "Storybook-keepers: Narratives and Numbers in Nineteenth-Century America," *Common-Place* 12, no. 3 (2012)

Recommended
Michael P. Closs, "Native American Number Systems," in *Native American Mathematics*, ed. Michael P. Closs (University of Texas Press, 1996)
Patricia Cline Cohen, *A Calculating People: The Spread of Numeracy in Early America* (University of Chicago Press, 1982), chs. 2 ("Colonial Counting") and 3 ("Patterns and Providence")

Module 3.2   Data of Slavery and Abolition

"Slavery Statistics," *Frederick Douglass' Paper*, October 2, 1851 [Canvas]

"Facts for Fanatics," *Charleston Courier*, May 13, 1853 [Canvas]

Ellen Gruber Garvey, "'facts and FACTS': Abolitionists' Database Innovations," in *"Raw Data" is an Oxymoron*, ed. Lisa Gitelman (MIT Press, 2013), 89-99 [Canvas]

Recommended
Caitlin Rosenthal, *Accounting for Slavery: Masters and Management* (Harvard UP, 2018), ch. 3 ("Slavery's Scientific Management")

Week 4: Measuring & Moralizing in the 19th Century

Week of Sept 21

Module 4.1   Moral Statistics, Scientific Racism, and Measuring Human Capacity in Antebellum America

Samuel George Morton, Crania Americana; or, A comparative view of the skulls of various aboriginal nations of North and South America. To which is prefixed an essay on the varieties of the human species (Philadelphia, 1839), Internet Archive, selections

Recommended
Ann Fabian, *The Skull Collectors: Race, Science, and America's Unburied Dead* (University of Chicago Press, 2010), ch. 3 ("Crania Americana")
Eli Cook, *The Pricing of Progress: Economic Indicators and the Capitalization of American Life* (Harvard UP, 2017), introduction and ch. 4 ("The Age of Moral Statistics")

Module 4.2   Almanacs: Worlds of Wisdom and Data at Your Fingertips

Molly McCarthy, "Reedeming the Almanac: Learning to Appreciate the iPhone of Early America," *Common-Place* 11, no. 1 (2010)
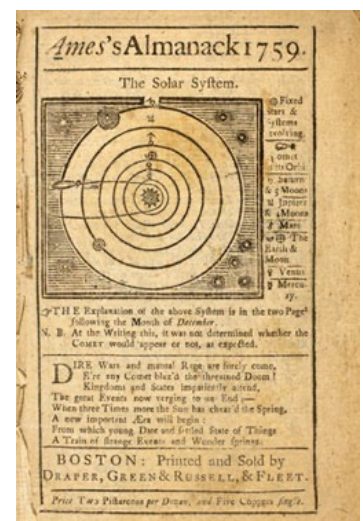
Week 5: Commercial Surveillance & Market Knowledge

Week of Sept 28

Paper #1 due [submit to Canvas between Sept 28 and Oct 5]
Module 5.1   Creditworthiness and Character before the FICO Score

J. D. O., "Mercantile Agencies," *New York Times*, October 29, 1851

J. D. O., "Mercantile Agencies," *New York Times*, November 7, 1851

Rachel Bunker, "The Equifax Way," *Jacobin*, September 18, 2017

Recommended
Josh Lauer, "From Rumor to Written Record: Credit Reporting and the Invention of Financial Identity in Nineteenth-Century America," *Technology and Culture* 49, no. 2 (2008): 301-24

Scott Sandage, *Born Losers: A History of Failure in America* (Harvard UP, 2006), chs. 4 ("Central Intelligence Agency, since 1841") and 5 ("The Big Red Book of Third-Rate Men")

Module 5.2   Weather, Crop, and Market Forecasting

Peter Knight, *Reading the Market: Genres of Financial Capitalism in Gilded Age America* (Johns Hopkins UP, 2016), ch. 2 ("Reading the Ticker Tape") [Canvas]

Recommended
Dan Bouk, "The Science of Difference: Developing Tools for Discrimination in the American Life Insurance Industry, 1830-1930," *Enterprise and Society* 12, no. 4 (2011): 717-31
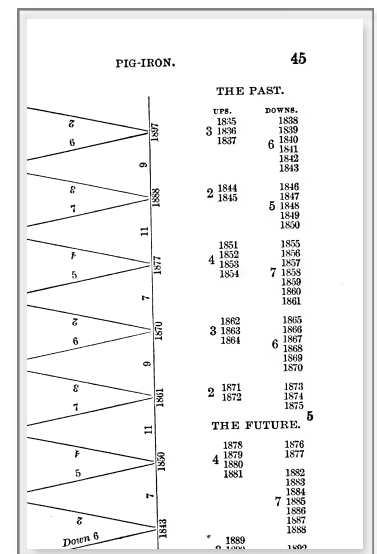
Week 6: Quantification & State Administrative Capacity

Week of Oct 5
Module 6.1   Counting the Dead during the American Civil War

Drew Gilpin Faust, *This Republic of Suffering: Death and the American Civil War* (Vintage, 2008), ch. 8 ("Numbering") [Canvas]

Recommended
Jacqueline Wernimont, *Numbered Lives: Life and Death in Quantum Media* (MIT Press, 2018), chs. 2 ("Counting the Dead") and 3 ("We Don't Do Body Counts")

Module 6.2   The Census and Who Counted (as) Americans

Ted Widmer, "How the Census Changed America," *The New Yorker*, May 1, 2019

Thomas P. Kinnahan, "Charting Progress: Francis Amasa Walker's *Statistical Atlas of the United States* and Narratives of Western Expansion," *American Quarterly* 60, no. 2 (2008): 399-423

Dan Bouk, "When the U.S. Counted Puerto Ricans for the First Time," Census Stories, USA blog, June 5, 2018

Recommended
Margo J. Anderson, *The American Census: A Social History* (Yale UP, 2015 [1988]), chs. 3 ("Counting Slaves and Freedmen: War and Reconstruction by the Numbers") and 4 ("The Census and Industrial America in the Gilded Age")

Week 7: Documenting & Visualizing Racial Identities & Experiences

Week of Oct 12
Module 7.1   Identity Documents, Migration, and Exclusion

Anna Pegler-Gordon, "Chinese Exclusion, Photography, and the Development of U.S. Immigration Policy," *American Quarterly* 58, no. 1 (2006): 51-77

Recommended
Craig Robertson, *The Passport in America: The History of a Document* (Oxford UP, 2010), chs. 1 ("Document") and 2 ("Name") [Canvas]

Module 7.2   Racial Violence and Racial Justice at the turn of the Twentieth Century

Ida B. Wells-Barnett, Red Record: Tabulated Statistics and Alleged Causes of Lynching in the United States (1895), Project Gutenberg, selections

Whitney Battle-Baptiste and Britt Rusert, eds., W. E. B. Du Bois's Data Portraits: Visualizing Black America (Princeton Architectural Press, 2018)

Recommended
Khalil Gibran Muhammad, *The Condemnation of Blackness: Race, Crime, and the Making of Modern Urban America* (Harvard UP, 2011), ch. 1 ("Saving the Nation: The Racial Data Revolution and the Negro Problem")

Week 8: Progressive Reformers & Their Social-Scientific Data

Week of Oct 19
Module 8.1   Mapping Tenement Life and Sweatshop Labor in 1890s Chicago

Hull House Maps and Papers (1895), Internet Archive, selections

Recommended
Susan J. Pearson, "'Age Ought to Be a Fact': The Campaign against

Child Labor and the Rise of the Birth Certificate," *Journal of American History* 101, no. 4 (2015): 1144-65

Module 8.2   The American Eugenics Movement and the Pricing of Human Lives

"WHAT THE BABY IS WORTH AS A NATIONAL ASSET: Last Year's Crop Reached a Value Estimated at $6,960,000,000---Why Every Child Is Worth More Than Ever Before," *New York Times*, Jan. 30, 1910

Selected primary sources from Cold Spring Harbor Laboratory's Image Archive on the American Eugenics Movement

Recommended
Amy Sue Bix, "Experiences and Voices of Eugenics Field-Workers: 'Women's Work' in Biology," *Social Studies of Science* 27 (1997): 625–68

Week 9: Classifying Soldiers, Students, & Citizens

Week of Oct 26
Module 9.1   Testing Intelligence and Measuring Aptitude

Take-home midterm essay due [submit to Canvas between Oct 26 and Nov 2]

Megan Gambino, "Document Deep Dive: What Was on the First SAT?" Smithsonian.com, April 11, 2013

Recommended
Nicholas Lemann, *The Big Test: The Secret History of the American Meritocracy* (Farrar, Straus and Giroux, 2000)
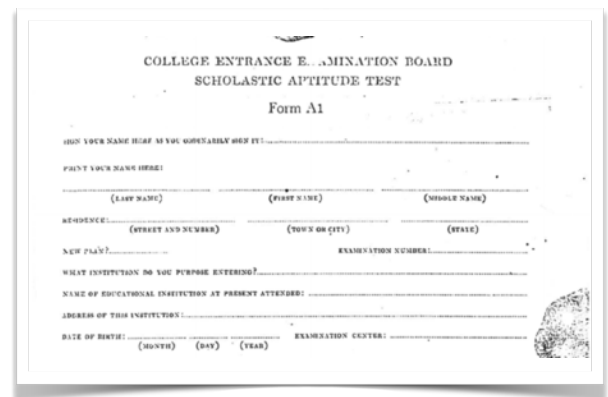
Module 9.2   Creating the "Average American"

Robert S. Lynd and Helen Merrell Lynd, *Middletown: A Study in Contemporary American Culture* (Harcourt, Brace, 1929), selections

NPR Planet Money podcast, episode 936: The Modal American

Recommended
Sarah E. Igo, "'A Gold Mine and a Tool for Democracy': George Gallup, Elmo Roper, and the Business of Scientific Polling, 1935-1955," *Journal of the History of the Behavioral Sciences* 42, no. 2 (2006): 109-34
Sarah E. Igo, *The Averaged American: Surveys, Citizens, and the Making of a Mass Public* (Harvard UP, 2008)

Week 10: Economic & Social Citizenship in New Deal America

Week of Nov 2
Module 10.1   Social Security Numbers, Cards, and Tattoos

Colin Koopman, *How We Became Our Data: A Genealogy of the Informational Person* (University of Chicago Press, 2019), ch. 1 ("'Human Bookkeeping': The Informatics of Documentary Identity, 1913-1937")

Recommended
Sarah E. Igo, *The Known Citizen: A History of Privacy in Modern America* (Harvard UP, 2018), ch. 2 ("Documents of Identity")

Module 10.2   Redlining, Real Estate, and Racial Inequality

Website: Mapping Inequality: Redlining in New Deal America (Read the introduction and explore the maps.)

N. D. B. Connolly, LaDale Winling, Robert K. Nelson, and Richard Marciano, "Mapping Inequality: 'Big Data' Meets Social History in the Story of Redlining," in *The Routledge Handbook of Spatial History*, Ian Gregory, Don Lafreniere, Don Debats, eds. (Routledge UK, 2018), 502-24 [Canvas]

Week 11: Economic Indicators & Data Archives

Week of Nov 9
Module 11.1   Inventing GDP

NPR Planet Money podcast, episode 522: "The Invention of 'The Economy'"
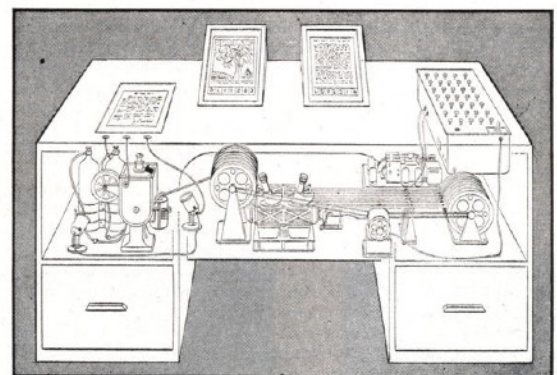
Recommended
Diane Coyle, *GDP: A Brief but Affectionate History* (Princeton UP, 2015)
Zachary Karabell, *The Leading Indicators: A Short History of the Numbers That Rule Our World* (Simon & Schuster, 2014)

Module 11.2   Imagining and Managing Cold War Databases

Vannevar Bush, "As We May Think," *The Atlantic*, July 1945

Vannevar Bush, "Memex Revisited," in *From Memex*

MEMEX in the form of a desk would instantly bring files and material on any subject to the operator's fingertips. Slanting translucent viewing screens magnify supermicro-film filed by code numbers. At left is a mechanism which automatically photographs longhand notes, pictures and letters, then files them in the desk for future reference.

to Hypertext, ed. James M. Nyce and Paul Kahn (Academic Press Professional, 1991), 197-216 [Canvas]

Rebecca Lemov, "Towards a Data Base of Dreams: Assembling an Archive of Elusive Materials, c. 1947-61," *History Workshop Journal* 67, no. 1 (2009): 44-68

Recommended
Thomas Haigh, "'A Veritable Bucket of Facts': Origins of the Database Management System," *SIGMOD Record* 35, no. 2 (2006): 33-49
Elena Aronova, "Geophysical Datascapes of the Cold War: Politics and Practices of the World Data Centers in the 1950s and 1960s," *Osiris* 32 (2017): 307-27

Week 12: Data Politics
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Week of Nov 16
Module 12.1   Gender, Labor, and Digital Computing

Lois Mandel, "The Computer Girls," *Cosmopolitan*, April 1967, pp. 52-56 [Canvas]

Nathan Ensmenger, "Making Programming Masculine," in *Gender Codes: Why Women Are Leaving Computing*, ed. Thomas J. Misa (Wiley, 2010)

Recommended
Jennifer S. Light, "When Computers Were Women," *Technology and Culture* 40, no. 3 (1999): 455-483

Module 12.2   Privacy, Transparency, and Data Friction

Arthur Raphael Miller, The Assault on Privacy: Computers, Data Banks, and Dossiers (University of Michigan Press, 1971), 34-69, 254-274 [Canvas]

FERPA (Family Educational Rights and Privacy Act) General Guidance for Students, U.S. Department of Education

Recommended
Family Educational Rights and Privacy, 20 U.S.C. § 1232g; 34 CFR Part 99
Sarah E. Igo, *The Known Citizen: A History of Privacy in Modern America* (Harvard UP, 2018), ch. 6 ("The Record Prison")

Week 13: Modeling & the Persistent Materiality of Data
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Week of Nov 23
Module 13.1   Statistics and Judgment in Professional Baseball

Paper #2 due [submit to Canvas between Nov. 23 and Dec. 4]

Film: *Moneyball* (2011), dir. Bennett Miller [Watch on your own via online streaming from Rutgers Libraries course reserves]

Recommended
Michael Lewis, *Moneyball: The Art of Winning an Unfair Game* (W. W. Norton, 2003)
Christopher J. Phillips, *Scouting and Scoring: How We Know What We Know about Baseball* (Princeton UP, 2019)

THANKSGIVING RECESS

Week 14: The Intimacies of Personal Data

Week of Nov 30
Module 14.1   Biometric Data and Quantified Selves

Natasha Dow Schüll, "Data for life: Wearable technology and the design of self-care," *BioSocieties* 11, no. 3 (2016): 317-33 [Canvas]

Joanna Radin, "'Digital Natives': How Medical and Indigenous Histories Matter for Big Data," *Osiris* 32 (2017): 43-64

Dan Bouk, "The History and Political Economy of Personal Data over the Last Two Centuries in Three Acts," *Osiris* 32 (2017): 85-106

**Module 14.2   Undercounting and the Politics of Census-Taking**

Hansi Lo Wang, "2020 Census Could Lead to Worst Undercount of Black, Latinx People in 30 Years," NPR.org, June 4, 2019

Kurtis Lee and Ben Welsh, "The 2020 Census Is Coming. Will Native Americans Be Counted?," *Los Angeles Times*, June 13, 2019

Kim TallBear, "The Emergence, Politics, and Marketplace of Native American DNA," in *The Routledge Handbook of Science, Technology, and Society*, ed. Daniel Lee Kleinman and Kelly Moore (Routledge, 2014), 21-37

Week 15: Calculating our Futures

Week of Dec 7
Module 15.1   Making Global Climate Data and Modeling "Wicked Problems"

Paul N. Edwards, "Knowledge Infrastructures for the Anthropocene," *The Anthropocene Review* 4, no. 1 (2017): 34-43
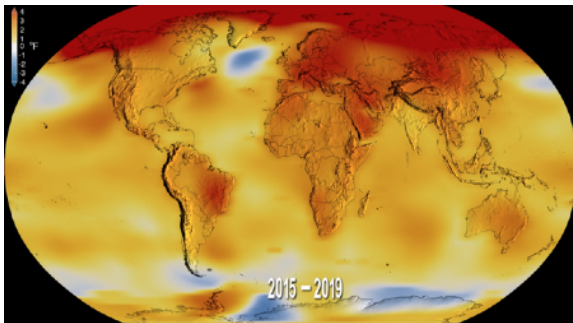
Leiserowitz, A., Maibach, E., Rosenthal, S., Kotcher, J., Bergquist, P., Ballew, M., Goldberg, M., & Gustafson, A. (2019). Climate change in the American mind: April 2019. Yale University and George Mason University. New Haven, CT: Yale Program on Climate Change Communication

Module 15.2   Surveillance Capitalism / Conclusions

Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (Public Affairs, 2019), selections [Canvas]

Bruno J. Strasser and Paul N. Edwards, "Big Data Is the Answer … But What Is the Question?," Osiris 32 (2017): 328-45

We will not have a traditional final exam in this course. Your final exam grade will be based on the short Canvas discussion posts (2 paragraphs) that will be part of the Week 15 modules. The reason for this modification is to avoid contributing to exam-related stress at the end of the semester.

Final exam schedules: https://scheduling.rutgers.edu/scheduling/exam-scheduling/final-exam-schedule

Final exam policies: https://scheduling.rutgers.edu/scheduling/exam-scheduling/final-exam-policies

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