Data & American Society:
From Almanacs to Algorithms

Hybrid online (asynchronous) & in-person (Wed 3:50-5:10 pm MU 208)

Instructor

Professor Jamie Pietruska
pietrusk@history.rutgers.edu
Online office hours (via Zoom):
    [DAYS/TIMES TBD]
    or by appointment
[Zoom link on Canvas homepage]

Teaching assistants

[TBD]
[TA contact information & office hours on Canvas homepage]

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

Books:
–Whitney Battle-Baptiste and Britt Rusert, eds., *W. E. B. Du Bois's Data Portraits: Visualizing Black America* (Princeton Architectural Press, 2018)
ISBN: 9781616897062. [**freely accessible as an ebook** via Canvas Reading List]
–Dan Bouk, *Democracy's Data: The Hidden Stories in the US Census and How to Read Them* (Macmillan) ISBN: 9780374602543
[on course reserve at Alexander Library]
Both books are also available from the Rutgers University Barnes & Noble Bookstore and online retailers.

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

Course description

What, if anything, is new about "Big Data" in the 21st-century age of generative AI? 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 data and privacy, surveillance, democracy, and injustice.

Course format

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- Hybrid (online asynchronous/in-person)

- Emphasis on multimedia sources (including short videos, documents, maps, visual art, film, 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 week and share your ideas, comments, and questions with your classmates,
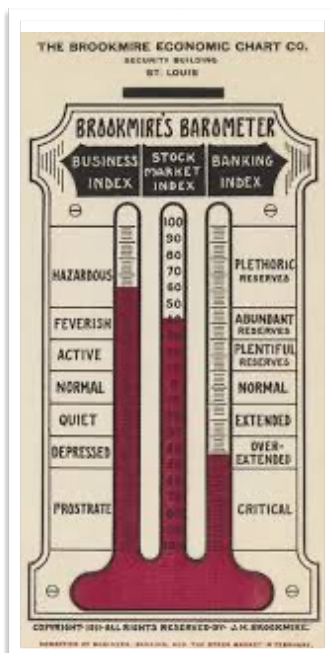
Big questions

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. Come to class & 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.

We will have regular opportunity to engage with the material and each other both in person and online. This is a **hybrid course**, meaning that we will have **one online asynchronous lecture** and **one in-person meeting** every week. We will also use the [Hypothesis](#) social annotation platform to have conversations in the margins of some of our assigned readings.

Attendance is essential and required. Attendance will be taken at every lecture once the add/drop period has ended, and this course will follow the [SAS attendance policy](#). It is highly unlikely that you will be able to succeed on exams without regular attendance at lectures and recitations, and your engagement on Hypothesis will be the basis of your class participation grade.

Yet it is important to acknowledge that Covid-19 is still with us; rest assured that **no one will ever be penalized for missing class due to illness or any other University-approved reason (e.g., religious observance, University-sponsored activity or event)**. **Please use good judgment and do not come to class if you are sick**; instead, email your TA or me, and we will help you catch up on whatever material you may have missed.

In the event that you do fall behind in the course for whatever reason, please contact your TA or me as soon as possible so that we can help you catch up. **I understand that everyone is doing their best, and I will do everything I can help you succeed in this course.**
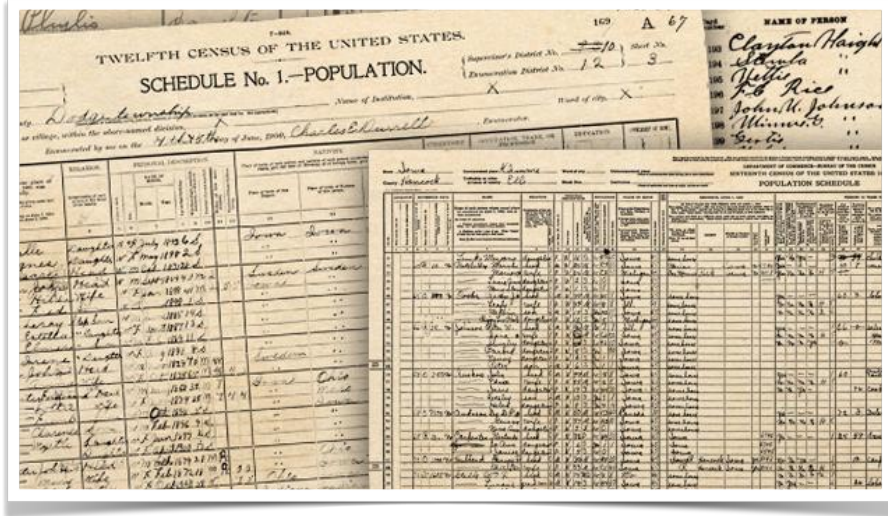
Note-taking in lecture is an important form of engagement and is necessary to succeed on the exams in this course. **No video or audio recording is permitted in lecture unless authorized by the Office of Disability Services.** Another way to stay engaged in the course is to communicate by email with the professor and TA and visit office hours to clarify and deepen your understanding of the course material.

2. Do the reading

Reading assignments should be completed **before** class on the date they are listed. **Always bring your readings with you to class in hard copy or digital format** as we will refer to the readings during our meetings. **It is important to make 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 books:
Available for purchase from the Rutgers University Barnes & Noble Bookstore and online retailers.
1. 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. **Digital copies are freely accessible via the Reading List tab on Canvas.**
2. Dan Bouk, *Democracy's Data: The Hidden Stories in the US Census and How to Read Them* (Macmillan, 2022), hardcover. ISBN: 9780374602543. On course reserve at Alexander Library.
Additional short readings and videos will be posted on Canvas.
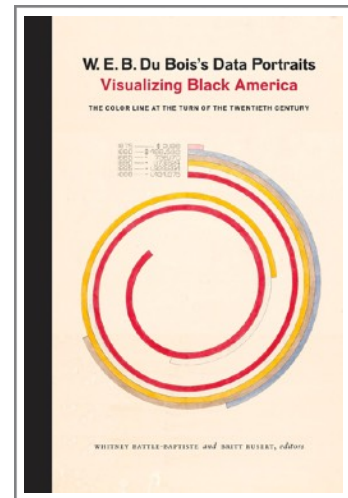
Assessment

20% **Exam #1**
(on lecture material and 19th-century almanacs)

20% **Midterm exam**
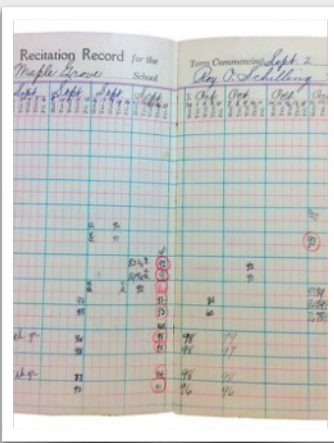(on lecture material and *W. E. B. Du Bois's Data Portraits*)

20% **Exam #2**
(on lecture material and *Democracy's Data*)

20% **Final exam**

20% **Class participation**
(Hypothesis annotations)

All exams will be given in person.

All exams must be completed to pass the course.

3. Complete assignments on time

You will receive detailed instructions for each Hypothesis annotation assignment and exam well in advance of the due date. Read the instructions carefully and plan ahead. Come to office hours to discuss your ideas and questions with the TA or the professor. (Don't wait until the night before the exam to begin reviewing!)

History Writing Tutor
Visit the History Writing Tutor in Van Dyck 101D to get expert help with any stage of your writing process. Check out the History Writing Tutor webpage for their drop-in office hours and step-by-step writing guides covering everything from brainstorming to comma use.

Submissions/Late work policy
Hypothesis annotations are **due before the start of class** on the day we will discuss that particular reading. We will use the annotations as the basis for our discussions. **No late Hypothesis annotations will be accepted** without a letter from the Dean of Students confirming serious extenuating circumstances that prevented you from completing your work on time or a letter from the Office of Disability Services specifying an accommodation of extra time that applies to minor homework assignments like Hypothesis annotations.

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 speak with the professor or TA during office hours. *Please note that we do not discuss grades over email.*

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

Makeup exams will not be given except in the case of serious extenuating circumstances that are verified in a letter from the Office of the Dean of Students. The Dean of Students can also provide the necessary support to ensure that you do not fall further behind in all your courses.

Exam format

We will have 3 exams during the semester and 1 exam during the final exam period. **All exams will be given in person.** The 3 exams during the semester will be held in our regular lecture hall. All exams will be traditional, handwritten blue-book exams. All exams are closed-book exams unless otherwise specified. Guidelines on how to prepare for exams will be distributed as the course gets underway.

Assessment of class participation

Our course format will offer us many opportunities to engage with the material and each other. I understand that not everyone may feel comfortable speaking in a large lecture hall, which is why your class participation grade will be based on the quality of your your Hypothesis annotations.

Rubric for Hypothesis annotations	
A	Hypothesis annotation convincingly demonstrates substantive and nuanced engagement with the entirety of the assigned source(s), including multiple concrete details as well as the main theme(s) of the reading
B	Hypothesis annotation demonstrates some or partial engagement with the assigned source(s), including minimal details
C	Hypothesis annotation demonstrates cursory engagement with the general themes of the assigned source(s) but lacks specificity (e.g., concrete details)
D	Hypothesis annotation demonstrates virtually no engagement with the assigned source(s)
F	Hypothesis annotation demonstrates no substantive engagement with the assigned source(s)

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 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:

•Arriving to class on time and attending the entire class period (unless you have notified the professor or TA in advance that you must leave early)

•Participating thoughtfully in class discussions and other activities

• Giving the material and each other your full attention (and not texting or engaging in online activity unrelated to the class)

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

5. Ask for help when you need it

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

Contacting the professor & teaching assistants

We are available during online office hours each week or by appointment. We check email regularly during business hours, Monday through Friday, and will reply as soon as we can, typically within 1 business day but occasionally longer in the event of illness or other extenuating circumstances. **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 & technology resources

Rutgers Resources for Student Success
The faculty and staff at Rutgers are committed to your success. Students who are successful tend to seek out resources that enable them to excel academically, maintain their health and wellness, prepare for future careers, navigate college life and finances, and connect with the RU community. Resources that can help you succeed and connect with the Rutgers community can be found at [success.rutgers.edu](#), and nearly all services and resources that are typically provided in-person are also available remotely.

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

Rutgers Student Health
http://health.rutgers.edu/

UWill Student Mental Health & Wellness
http://health.rutgers.edu/uwill/#1692387067708-ccd12908-188a

Rutgers University is pleased to announce a partnership with Uwill, the leading mental health and wellness solution for colleges and students. Uwill offers students free immediate access to teletherapy through its easy-to-use online platform. To schedule teletherapy, you can choose a therapist based on your own individual needs and preferences. Uwill is a secure and convenient path to clinical services beyond CAPS's office hours, including evenings and weekends. Access is quick and easy. Create a profile using your Rutgers email and book your first session in just minutes by clicking [here.](#)

If you are experiencing a mental health crisis, help is available 24/7/365 | (833) 646-1526

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.

Do Something to Help — Share a Concern

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

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.

Office for Violence Prevention & Victim Assistance

(848) 932-1181 | 3 Bartlett Street, New Brunswick, NJ 08901 | https://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.

Office of 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/getting-registered.

Scarlet Listeners

(732) 247-5555

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

Rutgers Student Basic Needs Center/Food Pantry

(848) 932-5500 | 126 College Ave., Room 115, New Brunswick, NJ 08901

https://ruoffcampus.rutgers.edu/basic-needs
basicneeds@rutgers.edu
Any student who faces challenges in accessing food, housing, clothing, childcare, mental health resources, financial resources, and/or transportation is urged to contact the Rutgers Basic Needs Center. 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.

Off-Campus Living & Community Initiatives
(848) 932-5500 | 39 Union St., New Brunswick, NJ 08901 | RUoffcampus@echo.rutgers.edu

Commuter Resources
https://ruoffcampus.rutgers.edu/listing-rates/commuter-resources

Offices of the Dean of Students—Advocacy, Outreach, and Support
(848) 932-2300 | 88 College Ave., New Brunswick, NJ 08901 | https://studentsupport.rutgers.edu/
Deanofstudents@echo.rutgers.edu

Rutgers Learning Centers Online Resources
https://learningcenters.rutgers.edu/resources
The Rutgers Learning Centers have put together a set of tools, tips, and strategies from Learning Centers professional staff and peer leaders. Their online learning resources on topics such as time management, study strategies, student wellness, and more are always available to help you succeed in your academic and professional lives.

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 contact the Office of the Dean of Students for assistance. If you are facing other financial hardships, please visit the Office of Financial Aid at https://scarlethub.rutgers.edu/financial-services/office-of-financial-aid/.

Academic Integrity Policy

The foundation of this course and any scholarly endeavor is academic integrity. Without academic integrity, the University cannot function. **All undergraduates, graduate workers, and instructors are expected to fully adhere to all principles of academic integrity at all times, without exception.** We are all responsible for understanding the Rutgers University policy regarding academic integrity. Ignorance of these policies or the consequences for violations is not an acceptable excuse.

In my experience at Rutgers, the vast majority of my students have followed all principles of academic integrity. But each semester, I invariably have a few students who do not, which is why the syllabus addresses academic integrity in detail. The Academic Integrity Policy at Rutgers is multifaceted; what follows are some of the most important principles as they apply to this course.

Originality: *All* written work—exams, as well as informal assignments like Hypothesis annotations—must be a student's own original work. Collaboration on major assignments (i.e., exams) is not permitted unless otherwise specified. Use of automated text generators like ChatGPT or corrupt file generators is not permitted in this course and falls under the category of "Fabrication," which is a formal violation in the Office of Student Conduct.

"Artificial intelligence" (AI): The past few years have witnessed a great deal of hype and critique surrounding ChatGPT and other large language models (LLMs) that use statistical modeling to predict language in response to a prompt. It is important to note that these kinds of tools do not actually *understand* human language; rather, they are able to generate statistically likely sequences of words and sentences in grammatically and syntactically sophisticated ways. (For a smart and clear explanation of what generative AI can and cannot do, I highly recommend this short article: Ted Chiang, "ChatGPT is a Blurry JPEG of the Web," *The New Yorker*, February 9, 2023.)

Simply put, writing *is* thinking. I am interested in how you are thinking about the course material, not in how ChatGPT predicts probable, generic, and sometimes incorrect statements about accidents and disasters. **You all have much smarter and more interesting things to say than ChatGPT does!** For that reason alone (and indeed there are many others), no one may use any forms of generative AI in this course.

In concert with Rutgers' Academic Integrity Policy, which mandates "that all work submitted in a course, academic research, or other activity is the student's own and created without the aid of impermissible technologies, materials, or collaborations," I have designed this course to promote your learning, critical thinking, skills, and intellectual development without reliance on unauthorized technology including chatbots and other forms of "artificial intelligence" (AI). Although you may use spell-check and simple grammar-check when proofreading your work, you will be asked to submit written work that adheres to the following statement: *"I certify that this assignment represents my own work. I have not used any unauthorized or unacknowledged assistance or sources in completing it including free or commercial systems or services offered on the internet or text generating systems embedded into software."* Please consult with me or your TA if you have any questions about the permissible use of technology in this class.

Citation practices: Citation practices are the very foundation of scholarly work, not a minor editing issue. Citations matter so much because they make clear our intellectual debts to other scholars and make our research and analysis transparent so that interested readers can follow our own path through the sources if they so choose. All writers must always give credit to other sources where credit is due; it is intellectually dishonest and completely unacceptable to omit or falsify citations. Any and all references to other sources within your own work must be properly cited according to the bibliographic conventions of the Chicago Manual of Style, which is available online through the Alexander Library and also through the Purdue Online Writing Lab. If you have any questions about quoting, paraphrasing, or referring to the work of others, please ask!

Some concrete examples: All of the following are violations of the University academic integrity policy and are not permitted in this course:

- copying language (even 1 sentence) from any source without quotation marks or attribution

- collaborating with a classmate on an assignment when instructed not to

- copying ideas or language from another person's work (whether Hypothesis annotation, Canvas discussion post, or essay)

- using outside sources in any capacity (including paraphrasing) when instructed not to

- having another person or entity produce an assignment for you

- falsifying any aspect of a citation (including page numbers)

- using an AI text generator like ChatGPT when instructed not to

- submitting a document created by a corrupt file generator in order to get more time to complete an assignment

Any and all violations of academic integrity—including plagiarism, fabrication, the use of outside sources when prohibited, and unauthorized collaboration—will result in the formal consequences and disciplinary action that are outlined in the [Rutgers policy on academic integrity](#). I have a zero-tolerance policy for academic dishonesty and refer all violations directly to the [Office of Student Conduct](#).

Rest assured that **making an honest mistake in your citation practices when using an assigned source is NOT a violation of academic integrity in this course. **No one will ever be penalized for an unintentional mistake.** Ask your TA or professor if you are unsure about how to handle sources and/or cite sources—we are always happy to help.*

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 as warranted by inclement weather, the ongoing public health emergency, or other unforeseen events. ***All the materials that you will need to read,***

annotate, and view each week will be posted in our Canvas modules. *The "Recommended"*
readings listed below are not required; they are suggestions for anyone who is especially interested in a
particular topic and would like to read more.

Week 1: How to Think Historically about Data

1.1
In-person lecture/discussion   Introduction and Course Overview

Course introduction: What is New/Not New about Big Data in an Age of Generative AI?

Recommended (not required)
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

2.1
Online asynchronous lecture   Privacy/Surveillance

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

danah boyd and Kate Crawford, "Critical Questions for Big Data," *Information, Communication &*
Society 15, no. 5 (2012): 662-79 **[Hypothesis annotation; link on Canvas]**

Recommended (not required)
Viktor Mayer-Schönberger and Kenneth Cukier, *Big Data: A Revolution That Will Transform How We Live,*
Work, and Think (Houghton Mifflin Harcourt, 2013)
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

2.2
In-person lecture/discussion   Democracy/Injustice

Colin Koopman, "How Democracy can Survive Big Data," *New York Times*,
March 22, 2018

Watch before class: *Coded Bias* (2020), directed by Shalini Kantayya (1 hr.,
25 min.) [available via Canvas Reading List]

Recommended (not required)
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
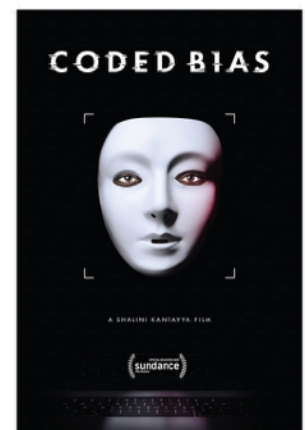
Intelligence?," Scientific American, February 25, 2017

Joy Buolamwini, "How I'm fighting bias in algorithms," TED Talk, Nov. 2016
Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (NYU Press, 2018)
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

3.1
Online asynchronous lecture   Indigenous and Colonial Numeracy

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

Recommended (not required)
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")

3.2
In-person lecture/discussion   Data of Slavery and Abolition

Marketplace podcast, "The disturbing parallels between modern accounting and the business of slavery," August 14, 2018 (7 min.)

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

Recommended (not required)
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

4.1
Online asynchronous lecture   Moral Statistics, Scientific Racism, and Measuring Human Capacity in Antebellum America

Ann Fabian, "The Curious Cabinet of Dr. Morton," in *Acts of Possession: Collecting in America*, ed. Leah Dilworth (Rutgers University Press, 2003), 112-37

NPR *All Things Considered* podcast, "Penn Museum Apologizes for 'Unethical Possession of Human Remains,'" April 27, 2021 (3 min.)

Recommended (not required)
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)
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")
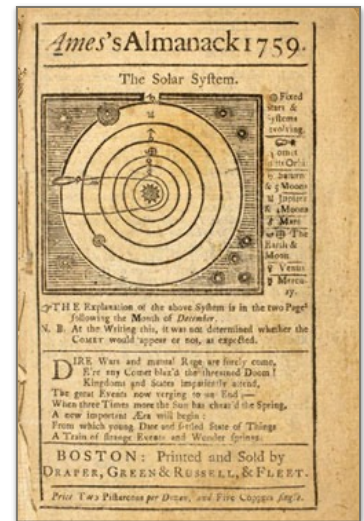
4.2
In-person lecture/discussion   Almanacs: Worlds of Wisdom and Data at Your Fingertips

Molly McCarthy, "Reedeming the Almanac: Learning to Appreciate the iPhone of Early America," *Common-Place* 11, no. 1 (2010)
{Hypothesis annotation; link on Canvas}

Week 5: Commercial Surveillance & Market Knowledge
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5.1
Online asynchronous lecture   Creditworthiness and Character before the FICO Score

Rachel Bunker, "The Equifax Way," *Jacobin*, September 18, 2017
{Hypothesis annotation; link on Canvas}

Recommended (not required)
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")

5.2   *In-class Exam #1*

Week 6: Quantification & State Administrative Capacity
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6.1
Online asynchronous lecture   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")

Recommended (not required)
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")

6.2
In-person lecture/discussion   The Census and Who Counted (as) Americans

Ted Widmer, "How the Census Changed America," *The New Yorker*, May 1, 2019 **[Hypothesis annotation; link on Canvas]**

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

Recommended (not required)
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")

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

Week 7: Documenting & Visualizing Racial Identities

7.1
Online asynchronous lecture   Identity Documents, Migration, and Exclusion

No reading due today; work on the reading for 7.2

Recommended (not required)
Craig Robertson, *The Passport in America: The History of a Document* (Oxford UP, 2010), chs. 1 ("Document") and 2 ("Name")

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

7.2
In-person lecture/discussion   Racial Violence and Racial Justice at the turn of the Twentieth Century
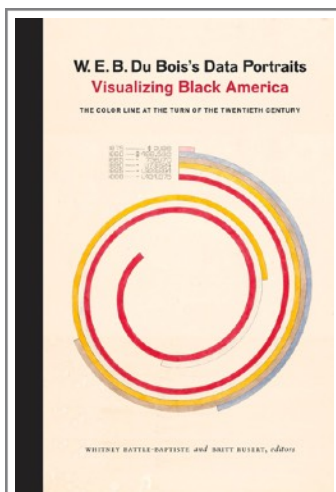
Video lecture on Canvas: "Ida. B. Wells, Racial Justice Activist & Data Journalist" (20 min.)

Ida B. Wells-Barnett, *Red Record: Tabulated Statistics and Alleged Causes of Lynching in the United States* (1895), chs. 1 & 2

Whitney Battle-Baptiste and Britt Rusert, eds., *W. E. B. Du Bois's Data Portraits: Visualizing Black America* (Princeton Architectural Press, 2018), pp. 23-36, 45-50, 51-137

Recommended (not required)
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

8.1
Online asynchronous lecture   Mapping Tenement Life and Sweatshop Labor in 1890s Chicago

Hull House Maps and Papers (1895), pp. vii-viii, 3-23 (and maps posted on Canvas)

Recommended (not required)
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
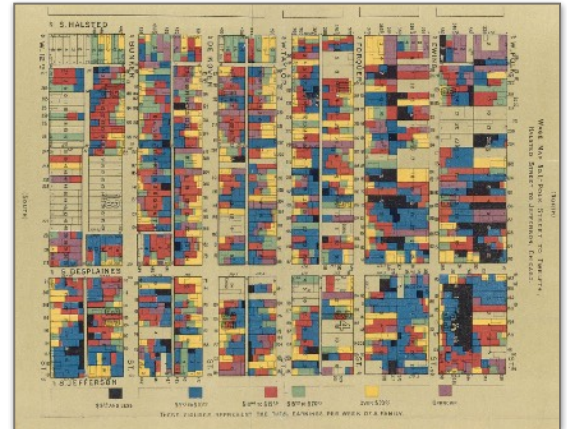
8.2   *In-class Exam #2*

SPRING RECESS

Week 9: Classifying Soldiers, Students, & Citizens

9.1
In-person lecture/discussion
Testing Intelligence and Measuring Aptitude

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

Recommended (not required)
Nicholas Lemann, *The Big Test: The Secret History of the American Meritocracy* (Farrar, Straus and Giroux, 2000)

9.2
Online asynchronous lecture   Creating the "Average American"

NPR *Planet Money* podcast, episode 936: "The Modal American," August 28, 2019 (28 min.)

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

Week 10: Economic & Social Citizenship in New Deal America

10.1
Online asynchronous lecture   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 (not required)
Sarah E. Igo, *The Known Citizen: A History of Privacy in Modern America* (Harvard UP, 2018), ch. 2 ("Documents of Identity")

10.2
In-person lecture/discussion   Redlining, Real Estate, and Racial Inequities

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, and Don Debats, eds. (Routledge UK, 2018), 502-24
[Hypothesis annotation; link on Canvas]

Week 11: Economic Indicators & Census Data

11.1
Online asynchronous lecture   Inventing GDP

NPR *Planet Money* podcast, episode 522: "The Invention of 'The Economy,'" March 15, 2017 (17 min.)

Recommended (not required)
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)

11.2
In-person lecture/discussion   The 1940 Census and Its Stories

Dan Bouk, *Democracy's Data: The Hidden Stories in the US Census and How to Read Them*, selected chapters TBA (on course reserve at Alexander Library)
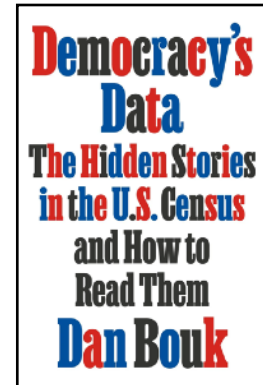
Week 12: Data Politics

12.1
Online asynchronous lecture   Gender, Labor, and Digital Computing

NPR *Planet Money*, Episode 576: "When Women Stopped Coding," July 22, 2016 [originally aired in October 2014] (17 min.)

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

Nathan Ensmenger, "Making Programming Masculine," in *Gender Codes: Why Women Are Leaving Computing*, ed. Thomas J. Misa (Wiley, 2010) **[Hypothesis annotation; link on Canvas]**

Recommended (not required)
Thomas Haigh, "'A Veritable Bucket of Facts': Origins of the Data Base Management System," *SIGMOD Record* 35, no. 2 (2006): 33-49
Jennifer S. Light, "When Computers Were Women," *Technology and Culture* 40, no. 3 (1999): 455-483
Catherine D'Ignazio and Lauren Klein, *Data Feminism* (MIT Press, 2020)

12.2   *In-class Exam #3*

Week 13: Modeling & the Persistent Materiality of Data

13.1
Online asynchronous lecture   Statistics and Judgment in Professional Baseball

Watch before viewing lecture: *Moneyball* (2011), directed by Bennett Miller [available via Canvas Reading List]

Recommended (not required)
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)

13.2
In-person lecture/discussion   Modeling and Visualizing Global Climate Data
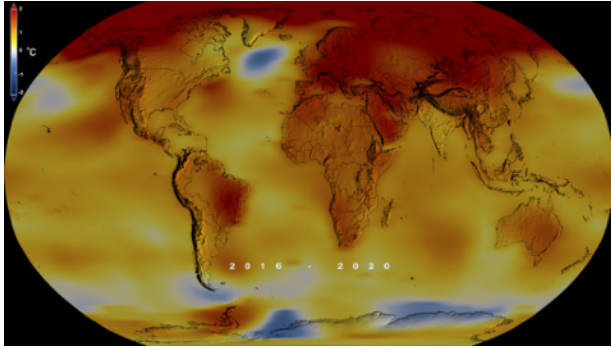
Somini Sengupta, "The Surprising Story of 'Warming Stripes,'" *New York Times*, June 17, 2022

Recommended (not required)
Paul N. Edwards, "Knowledge Infrastructures for the Anthropocene," *The Anthropocene Review 4, no. 1 (2017): 34-43*

Week 14: The Intimacies of Personal Data

14.1
Online asynchronous lecture   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

Recommended (not required)
Dan Bouk, "The History and Political Economy of Personal Data over the Last Two Centuries in Three Acts," *Osiris* 32 (2017): 85-106

Wed Apr 26
In-person lecture/discussion   Statistical and Moral Reckoning with the Covid-19 Pandemic

David S. Jones and Stefan Helmreich, "The Shape of Epidemics," *Boston Review*, June 26, 2020
          {Hypothesis annotation; link on Canvas}

Rebecca Onion, "When 194,000 Deaths Doesn't Sound Like So Many," *Slate*, September 13, 2020

Recommended (not required)
Joanna Radin, "'Digital Natives': How Medical and Indigenous Histories Matter for Big Data," *Osiris* 32 (2017): 43-64

Week 15: Conclusions

15.1   Data Capitalism and Data Justice

Data for Black Lives, "Data Capitalism" micro-site

Catherine D'Ignazio and Lauren Klein, *Data Feminism* (MIT Press, 2020), "Conclusion: Now Let's Multiply"

Recommended (not required)

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

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

FINAL EXAM (DATE AND TIME TBD)

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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