Data Cultures - DCS 204

Bates College - Winter 2021 - Module C
Dr. Shrout's Office: P'gill 109
Dr. Shrout's Zoom Room: https://bit.ly/Shrout-Zoom-2021 (for office hours and zoom class meetings)
Schedule office hours: www.bit.ly/Shrout-Appointments
Zoom Hours: Tu 10:00 am - 12:00 pm EST
Walking Office Hours: Th 11:00 pm - 12:00 pm EST

Data is not neutral. Data is not naturally-occurring. Data is made, processed and analyzed by people. Data enacts power. Understanding the different cultural frameworks in which data operates helps us to more thoughtfully engage with it and makes our analyses more powerful.

This class provides an opportunity for students to immerse themselves in a module-long project in digital environments, moving from 'analog' archives, through data structuring, and quantitative analysis, and culminating with a public-facing data project.

Learning Goals and Objectives

Learning goals are the higher order ambitions that I have for this class. **Learning objectives** are specific, measurable competencies which indicate that the learning goals have been met.

I am including both here, so that you have a sense of why we are doing the work that we are in this class.

LEARNING GOAL	**LEARNING OUTCOME**
Explain how datasets are constructed, and how their construction leads to subjective representations of the world.	*Build* a dataset that represents the early financial history of Bates College, and the relationship between the college and the American slave economy.
Develop a framework for predicting how different ways of structuring data will help or hinder analyses.	
Understand how programming languages can be used to manipulate, analyze and visualize data, keeping in mind the subjectivity of that data.	*Read and write* code that manipulates, visualizes and analyzes data using the programming language R.
Translate your learning and the work of the class into informed civic action in pursuit of social justice and responsible stewardship of the wider world.	*Create and curate* an online presence that presents the work of the class to audiences beyond Bates.
Differentiate between different approaches to the study of data and digital humanities.	*Become conversant with scholarly work* on data science, quantitative analysis, digital humanities and related fields

Structure of the course

This course is designed to be accessible to students who are able to be on campus (if such attendance is deemed safe), those who are learning remotely and able to join class during our scheduled meeting times, and those who are learning remotely and are not able to join class during our scheduled meeting times. As information about COVID - globally, nationally and in the state of Maine - develops, some of the in-person aspects of the class might need to move to remote. As soon as I know anything, I'll tell you.

We are scheduled for five days a week, and U.S. federal guidelines dictate that each student should spend 24 hours on each class each week. However, we will spread that time between different activities. I have adapted a tutorial model for this course, which pairs outside work (watching recorded video lectures, reading texts, completing homework) with group discussions. These meetings will either happen in-person or remotely, depending on your needs and the state of public health. Two meeting slots will be scheduled during our assigned class time, but I am happy to schedule other times to accommodate schedule conflicts and time zones.

Weekly Overview:

During our first week, we'll cover the mechanics of the course.

During weeks 2-6:

- On **Mondays** you will watch video lectures and complete readings about data structuring and take notes on those readings. You will then meet with me and group of other students to review the concepts and make sure that you can apply them in code.
- On **Tuesdays** you will practice converting the concepts introduced on Monday into code. You'll be working in pairs on a worksheet, and I will provide supplementary videos.
- On **Wednesdays** you will watch video lectures and complete readings that introduce important theory or context and take notes on those readings. We'll meet in class groups and discuss the readings and the theory and how it can be applied to what we're learning in our class.
- On **Thursdays** you will synthesize our Wednesday readings, lectures and discussions in pairs or threes, scheduled whenever you choose to meet. These meetings will answer reading questions that apply the theory to our data.
- On **Fridays** you will watch video lectures and do readings on data analysis and take notes on those readings. We'll meet in our class groups and discuss the readings and videos and practice using R to complete the analyses.
- **Over the Weekend** you'll work on your own to bring together the major concepts of the week in a public-facing digital form.

We have no scheduled work during week 7. This week is devoted to work on your final projects.

Universal Learning & Learning in a Community

Many of us learn in different ways. For example, you may process information by speaking and listening, so while lectures are quite helpful for you, some of the written material may be difficult to absorb. You might have difficulty following lectures, but are able to quickly assimilate written information. You may need to fidget to focus in class. You might take notes best when you can draw a concept. For some of you, speaking in class can be a stressful or daunting experience. For some of you, certain topics or themes might be so traumatic as to be disruptive to learning.

The principle of Universal Learning calls for our classrooms, our virtual spaces, our practices and our interactions to be designed to include as many different modes of learning as possible. Universal Learning asks all of us - students, A.T.s and professor - to come to class with mutual respect, civility, and a willingness to listen to and observe others.

If you anticipate or experience any barriers to learning in this course, please reach out to me and your student support advisor. If you have a disability, or think you may have a disability, you may also want to meet with Abigail Nelson, Assistant Dean of Accessible Education and Student Support, to begin this conversation or request an official accommodation. You can find more information about the Office of Accessible Education and Student Support, including contact information, here: http://www.bates.edu/accessible-education/. If you have already been approved for accommodations through the Office of Accessible Education, please meet with me so we can develop an implementation plan together. If you do not have a documented disability, remember that student support services are available to all students.

The college prohibits discrimination on the basis of race, color, national or ethnic origin, religion, sex, sexual orientation, gender identity or gender expression, age, disability, genetic information or veteran status and other legally protected statuses in the recruitment and admission of its students, in the administration of its education policies and programs, or in the recruitment of its faculty and staff. Bates College adheres to all applicable state and federal equal opportunity laws and regulations.

Violations of this policy can be reported to Gwen Lexow, Director of Title IX and Civil Rights Compliance, at glexow@bates.edu or 207-786-6445 or
www.bates.edu/sexual-respect/non-discrimination-policy/

Finally, this class is conceptualized as a collaborative and community effort. Everyone should strive to be constructive in their discussion, to make space for experiences different from their own, and open to alternative ideas. Talking over and interrupting your colleagues will never accrue you more credit.

Tools: Google docs, Lyceum, Wordpress, and Notebooks

This class uses a variety of tools - some of which will be familiar to you, and some of which will be new. All of these tools will be introduced in class, and you'll have support as you learn to use them.

We'll use Google docs in a variety of ways. One is working on this syllabus. This syllabus is a collaborative document. We might decide, as a class, to cut readings, or add them. We might decide to move deadlines, or add assignments. We might make other changes in service of a more equitable classroom. I will never make unilateral changes to the syllabus. I will never add readings or assignments without cutting elsewhere. If you have questions or suggestions, please let me know.

Throughout the semester, we'll do some work in collaborative google docs. This allows you to take notes with your colleagues and share information without needing to share physical space.

We will be using a new(ish) tool called Domain of One's Own this semester. This means that you will have the opportunity to create and curate your own web presence. You can do this under your own name. You can also do it anonymously. The point is to introduce the idea of digital ownership and give you a curricular space to explore the possibilities of that ownership.

We will also be using ed, an interface for R programming.

On Teaching and Learning in a Time of COVID (inspired by Dr. Roopika Risam)

While the structure of this class is designed to mimic the work of a typical semester at Bates, we are living in deeply atypical times. This might mean that the class changes mid-module, in ways that we cannot anticipate whether because of actions of the college, state or federal governments, or because one or more of us gets sick.

My first priority - and my primary obligation to you - is your well-being while at Bates. If you are experiencing challenges that affect your work in this class please let me know. I will not ask you to disclose details or particulars (though you are welcome to share if you want to). I will work with you to develop a plan for the semester that meets your needs.

Policies

Academic Integrity:

Your academic work is governed by The Bates College Statement on Academic Integrity (http://www.bates.edu/student-affairs/student-conduct/academic-integrity-policy/). Collaboration in this course is encouraged, but the result must be in your own words and or voice, and collaborators should be acknowledged openly. If an assignment product is submitted as a group, I expect that each of you has participated equally in the creation of the final product. I expect honesty and communication from you, so that you may get the most benefit from your investment of time in this course.

Access and Response Times:

I can be reached by e-mail during normal business hours (9-5, m-f) EST, and will generally respond to e-mails received during those hours within 24 hours of receipt. I will not respond to e-mails on the weekends or over breaks.

Changes to this syllabus:

I will not change this syllabus without talking to the class. However, we might collectively decide to make changes in light of student interest or the COVID pandemic.

Drafts:

I am happy to look at drafts and homework assignments, but in order to get my comments you must meet with me to discuss your draft. You are responsible for scheduling an office hours appointment.

Life Happens:

You will have one “life happens” credit to use during the semester. It can be applied to either a code-writing or an assignment, and gets you an automatic three day extension. In order to use it, you must let me know before the assignment is due.

Additionally, you can skip the engagement portions of TWO classes during the module, and at your own discretion. Each of you gets to decide which classes you wish to miss. More than three absences will impact your final grade.

If illness or personal events will result in you missing more than two engagement activities, or makes turning work in on time impossible, you must be in touch as soon as possible so that we can come up with a plan. We will work with your student support advisor to plot a path forward.

Office Hours:

You must come to office hours to check in during the first three weeks of the module. You are encouraged to come by at other times as well – feel free to discuss concerns or drafts, or to ask questions about things we have covered in class. Please check http://bit.ly/Shrout-Appointments to find and reserve a time that works for you. If none of my regularly scheduled office hours fit your schedule, please e-mail to set up an alternate meeting time.

Revisions:

Any assignment that receives Needs Work can be revised. The revision must be turned in within one week of the assignments' return. In order to receive credit, you must meet with either myself or the A.T. to sign off on your revision. You may only submit each revision once. If an assignment is not submitted on time, and receives No Credit, it cannot be revised.

Submissions:

Some of your work (reading responses, final project components) will be submitted via your course blog, and aggregated to the shared course blog. Other of your work (code) will be submitted via Lyceum. Submission links on this syllabus and in assignments will point directly to the correct submission location.

Technological Distractions:

While computers are an essential part of this class (especially if you are engaging with class via zoom or videos) they are also an incredible distraction. While working for this class you are not expected to use them for non-class activities. I strongly recommend closing out distractions and turning off notifications before engaging with this class.

Writing Help:

For assistance with your writing in this or any other course, visit the Peer Writing and Speaking Assistants (PWSAs) at the Writing & Speaking Center in Ladd Library. PWSAs help Bates students with everything from PowerPoint presentations for first-year seminars, to papers in all academic disciplines at all course levels, to senior theses and posters for the Mount David Summit. As students themselves, Writing and Speaking Assistants communicate on students' terms, bringing student-oriented perspectives, insights, and local knowledge to the conversation. No appointment is needed, simply stop by our daytime or evening hours in Ladd Library. Conferences typically last between thirty and fifty minutes. Learn more about what PWSAs do at http://www.bates.edu/writing/

Writing Style:

You are expected to write clearly and use one of the citation styles that is common to different disciplines. Depending on your "home" discipline, this will likely be either MLA, Chicago, Turabian or APA. Pick one citation style, and use it for the semester. As we move into digital scholarship, you will find that there are not clear guidelines for citing in digital formats. We will discuss appropriate citations in class – however, a lack of clear consensus among scholars does not mean you are not required to cite. Rather, you are required to develop your own coherent system for citations.

Assessment

A Note About Grading (Inspired by Dr. Ryan Cordell):

Grading is famously contentious and can often feel subjective. What is framed as rigor in one class might be framed as a set of specific cultural expectations in another. An "A" in an intro class signals a different kind of expertise than an "A" in an upper-level seminar. In classes that rely on discussion, writing and testing out ideas, letter grades often feel particularly fraught.

For all of these reasons, this class uses a modified version of a grading framework called competency-based grading. Each assignment is assessed as Satisfactorily Completed (SC), Needs Work (NW), or Not Submitted/No Credit (NC). If you submit an assignment and it Needs Work, you can revise it to get an SC. The goal here is to evaluate whether you've learned some important content and skills, and help you improve until you do.

Because the college asks for letter grades, I'll convert like this: Your overall grade for each category is the number of SC assignments plus 50% of the number of NW divided by the total number of assignments. (This means that you can leave an assignment at NW if you're happy to receive half credit). The categories contribute towards your final grade as follows:

CATEGORY	TOTAL OPPORTUNITIES FOR ASSESSMENT	CONTRIBUTION TO FINAL GRADE
Engagement in M/W/F small group meetings	**18**	**20%**
Code-writing Worksheets	**6**	**15%**
Reading Notes and Video Questions	**48**	**15%**
Reports on Thursday Meetings	**5**	**15%**
Weekly Synthesis	**6**	**20%**
Final Project	**4**	**15%**
Project Data		
Project Code		
Project Website		
Public Presentation		

*****IN ORDER TO PASS THE CLASS, YOU MUST COMPLETE MORE THAN 59% OF THE ASSIGNMENTS IN EACH OF THE MAJOR ASSESSMENT CATEGORIES*****

The U.S. federal guidelines mandate 24 hours of coursework (including instructor time and out-of-class work) per week. Along with descriptions of each assessment category, there is an estimate of how much time you should spend on each category each week. If you find that you are taking much more time than what is suggested here, please be in touch with me to talk about strategies. If you find that you are taking much less time than what is suggested here, it might be that you are not fully engaging with the material.

Engagement in small group meetings with Dr. Shrout (3 hours / week):

In this class, engagement will take place in our small-group meetings on Mondays, Wednesdays and Fridays.

Your two lowest engagement assessments will be dropped - in practice this means that you can miss two small group meetings with no penalty, though you will still need to learn the material covered in them.

SCALE
Satisfactorily Completed: Speak constructively at least once in each synchronous conversation, contribute constructively to asynchronous discussion and actively participate in any activities. Does not overpower other students. Comes to meetings with prepared answers to the reading questions (when assigned). **Needs work**: Does not constructively contribute to discussions, OR routinely overpowers other students OR does not participate equally in all group discussions and activities. Comes to meetings with some but not all prepared answers to the reading questions (when assigned). **No credit:** Does not contribute.

Tuesday Code-writing Worksheets (4 hours / week - this includes time to watch videos):

On Tuesdays you will be given worksheets that ask you to read, annotate or write your own code. Some will also ask you to transcribe and standardize data. You will complete these in pairs.

SCALE
Satisfactorily Completed: Makes an effort to answer all of the questions, and makes note of the places that were challenging. Credits each team member with what they contributed. **Needs work**: Does not make an effort to answer all of the questions, does not make note of the places that were challenging. Credits each team member with what they contributed. **No credit:** Does not submit a worksheet OR does not credit each team member.

Completing Readings, Reading Notes, Videos and Video Questions (6 hours / week - this includes time to watch videos):

This course requires that you substantively engage with the readings and videos. This engagement includes taking robust notes on each reading AND answering brief questions within the videos.

I'll be asking you to share your reading notes with me via Lyceum, and I'll leave feedback in them.

SCALE
Satisfactorily Completed: For each reading take notes that both summarize the readings and metacognitively respond to them. For each video, correctly answer the questions embedded within the videos. **Needs work**: For each reading take notes that do not summarize the readings and/or metacognitively respond to them. For each video, does not correctly answer the questions within the videos. **No credit:** Does not respond to video questions OR does not submit notes.

Reports on Thursday Meetings (2 hours / week):

On Thursdays, you will meet in groups of 2 or 3 to talk or chat asynchronously about how to apply the reading from this week to our data, and to raise questions that we can ask of our data. As part of those meetings, I'll ask you to take notes in a collaborative document.

SCALE
Satisfactorily Completed: Your group fully contributes to the shared notes document, and explains how each group member contributed. **Needs work**: Your group contributes to the shared notes document but leaves some prompts unanswered OR does not explain how each group member contributed. **No credit:** No contribution from your group.

Weekly Synthesis (6 hours / week):

At the end of each week, you'll receive a prompt that asks you to reflect on what you learned that week, apply the coding, data structuring and analysis principles in light of the theory, and present it for an audience of informed but non-expert readers on your course blog.

These prompts will include specific rubrics for SC, NW and NC.

Final Project Components (3 hours / week on average, though some weeks will call for more or less time):

In preparation for the final projects for this class you will work on the following over the course of the semester:

- Articulating a question about the data that the class has collectively produced that you would like your final project to answer
- Revising that question
- Writing 500 words on the state of the scholarly literature for your question..

The final project itself will consist of:

- Data that can be downloaded, along with a description of the process of producing the data. This includes background on the data itself (from where was it collected), any decisions that you made as you standardized it, any items that you decided to omit, and why, and any interpretation that you undertook (for example, locating biographical information about donors). This description should be approximately 500 words.
- Replicable code that can be run by someone unfamiliar with your project to produce analysis or results. Your code should include any work you did to standardize your data. It should produce **at least one analysis or one visualization**. It should be commented so that a person who is not familiar with R or with your data can run it to produce results.
- A website including write-ups of your literature review, analysis, findings and visualizations. This website should be accessible for anyone who is not familiar with your project. It should include an introduction that clearly articulates your research question (100 words), your discussion of your data (500 words) [THIS IS THE SAME AS THE 500 WORDS ON DATA ABOVE] and a review of the relevant scholarship, in order to explain the significance of your findings (500 words)
- A public (zoom) presentation of your findings. (If there are time zone concerns, your presentation can be pre-recorded with asynchronous engagement).

Longer descriptions of these assignments and rubrics will be provided.

Readings

All of the readings are available via the Bates library site or are linked here. Use this syllabus (rather than Lyceum) to track your reading, writing and other course obligations.

I have drawn from several books for some of the more technical parts of the class. If you want to read further, I recommend:

- Six Septembers: Mathematics for the Humanist
- Humanities Data in R: Exploring Networks, Geospatial Data, Images and Text
- Introduction to R

Schedule

Week 1 - Introduction to the Course	
Wednesday, February 17	**Read (and take notes on) Before Class Meeting:** ● W. Caleb McDaniel, "How to Read for History," *W. Caleb McDaniel* (blog), http://wcaleb.org/blog/how-to-read. ● Emma Soler, "Founded by Abolitionists, Funded by Slavery: Past and Present Manifestations of Bates College's Founding Paradox" (Lewiston, ME, Bates College, 2020). **Watch Before Your Class Meeting:** ● Welcome to week # 1 video ● Video on posting to Wordpress ● Video on Paired Programming **Do Before Your Class Meeting:** ● Annotate this syllabus. Use the comment feature either to ask clarifying questions, comment on policies, share thoughts on readings or react to assignments or to "plus" another comment (respond to a colleague's comment with + to indicate that you have the same comment or question). Leave at least two comments and/or questions and/or plusses ● Set up Wordpress and make a test post ● Submit notes on the readings ● Complete the reading questions (on your own, come to class prepared to discuss them) ● Complete the getting to know you survey ● Sign up for an office hours meeting with me in the first three weeks.
Thursday, February 18	**Watch Before Meeting With Your Partner:** ● Video on Notebook Environments ● Video on The Programming Language R ● Video on Variables and Assignments ● Video on Functions and Parameters **Complete and Submit By 11:59 PM EST:** ● Code-writing worksheet # 1
Friday, February 19	**To Read (and take notes on) Before Your Class Meeting:** ● "The Nimble Tents Toolkit," http://nimbletents.github.io/rapidresponse/.

	To Watch Before Your Class Meeting: ● Video on Lewiston and the Mills **To Do Before Your Class Meeting:** ● Look at the Bates Cotton Invoice, and identify the different kinds of information that it contains. ● Submit notes on the readings. ● Complete the reading questions.
Sunday, February 21	**Complete and Submit by 11:59 PM EST:** ● Synthesis # 1: Write a Wordpress post of about 500 words reflecting on your learning this week. Your post should: ○ Comment on things you knew before coming into the course ○ Comment on things you learned this week ○ Comment on things that changed your perspective on something you already knew.
Week 2 - One-Dimensional Data	
Monday, February 22	**Watch Before Your Class Meeting:** ● Welcome to week # 2 video ● Video on one-dimensional data ● Video on indexing ● Video on subsetting **Do Before Your Class Meeting:** ● Paleography tutorial
Tuesday, February 23	**Watch Before Meeting With Your Partner:** ● Video on implementing indexes in R ● Video on logical operators in R ● Video on subsetting in R **Complete and Submit by 11:59 PM EST:** ● Code-writing worksheet # 2
Wednesday, February 24	**Read/Watch (and take notes on) Before Your Class Meeting:** ● P. Gabrielle Foreman et al, "Writing about 'Slavery'? This Might Help," accessed July 2, 2020, https://docs.google.com/document/d/1A4TEdDgYslX-hlKezLodMlM71My3KTN0zxRv0IQTOQs/mobilebasic. ● Robin D. G. Kelley, *What Is Racial Capitalism and Why Does It Matter?* (Simpson Center for the Humanities, University of Washington, 2017),

	https://www.youtube.com/watch?v=REo_gHIpvJc. **Watch Before Your Class Meeting:** ● Video on the chronology of slavery in North America from the 1619 Project **Do Before Your Class Meeting:** ● Take notes on the reading and Kelley video. ● Complete the reading questions.
Thursday, February 25	**Complete and Submit by 11:59 PM EST:** ● Meet with classmates ● Agree on regular meeting times and modes, create calendar events in google, and invite team members and me to those events. ● Respond to collaborative discussion prompt for week # 2
Friday, February 26	**Read (and take notes on) Before Your Class Meeting:** ● Catherine D'Ignazio and Lauren Klein, "Introduction: Why Data Science Needs Feminism," in *Data Feminism* (PubPub, 2020), https://data-feminism.mitpress.mit.edu/pub/frfa9szd/release/3. **Watch Before Your Class Meeting:** ● Video on exploratory statistics ● Video on histograms **Do Before Your Class Meeting:** ● Take notes on the reading. ● Complete the reading questions.
Sunday, February 28	**Complete and Submit by 11:59 PM:** ● Synthesis # 2: Write a wordpress post of about 500 words reflecting on your learning for the week. Your post should: ○ Comment on things you learned this week ○ Comment on things that changed your perspective on something you already knew. ○ **Undertake analyses of all of the cotton weights (found in the in_class_Feb_26 Ed notebook)** ○ Include commented code that another person who works with R could understand ○ Include an histogram (of cotton weights, costs, or days of stolen labor) ○ Reflect on what the histogram tells us ○ Interpret the histogram in light of theory. ○ Explicitly reference at least one reading from this week.

Week 3 - Two-Dimensional Data	
Monday, March 1	**To Watch Before Your Class Meeting:** ● Welcome to week # 3 video ● Video on two-dimensional data ● Video on scatterplots and correlations **To Do Before Your Class Meeting:** ● Look at the Maine State Seminary donor lists, and identify the different kinds of information that it contains.
Tuesday, March 2	**Watch Before Meeting With Your Partner:** ● Video on dataframes and data structures in R ● Video on subsetting dataframes in R **Complete and Submit by 11:59 PM EST:** ● Code-writing worksheet # 3
Wednesday, March 3	**Read (and take notes on) Before Your Class Meeting:** ● Marisa J. Fuentes, "Power and Historical Figuring: Rachael Pringle Polgreen's Troubled Archive," *Gender & History* 22, no. 3 (November 1, 2010): 564–84. ● Craig Steven Wilder, "Cotton Comes to Harvard," in *Ebony and Ivy: Race, Slavery, and the Troubled History of America's Universities* (Bloomsbury Publishing USA, 2014). **Watch Before Your Class Meeting:** ● Video on the Muskie Archives **Do Before Your Class Meeting:** ● Take notes on the reading. ● Complete the reading questions.
Thursday, March 4	**Complete and Submit by 11:59 PM:** ● Meet with classmates ● Respond to collaborative discussion prompt week # 3 ● If you received a Needs Work on CWW2 - revise it.
Friday, March 5	**Read (and take notes on) Before Your Class Meeting:** ● Catherine D'Ignazio and Lauren Klein, "4. 'What Gets Counted Counts,'" in *Data Feminism* (PubPub, 2020), https://data-feminism.mitpress.mit.edu/pub/h1w0nbqp/release/2. ● Matthew L. Jockers, "The Ancient World in Nineteenth-Century Fiction; or, Correlating Theme, Geography, and Sentiment in the Nineteenth Century Literary Imagination," *Digital Humanities Quarterly* 010, no. 2 (June 7, 2016).

	Watch Before Your Class Meeting: ● Video on implementing and interpreting scatterplots in R **Do Before Your Class Meeting:** ● Take notes on the reading. ● Complete the reading questions.
Sunday, March 7	**Complete and Submit by 11:59 PM:** ● Synthesis #3: Write a wordpress post of about 500 words reflecting on your learning for the week. Your post should: ○ Comment on things you learned this week ○ Comment on things that changed your perspective on something you already knew. ○ Include a scatterplot that visualizes the relationship between the amount of money donated and the day of the month from your transcribed data and the code that you used to produce it, commented so that another person who works with R could understand it. ○ Include a calculation of correlation of the relationship between the amount of money donated and the day of the month and the code that you used to produce it, commented so that another person who works with R could understand it. ○ Reflect on what the scatterplot and calculation of correlation tells us (if anything). ○ Discuss other numerical attributes that you would be interested in plotting with regards to the Maine State Seminary data. ○ Explain how we should think about the Maine State Seminary data in light of the Fuentes reading.
Week 4 - Three-Dimensional Data	
Monday, March 8	**Watch Before Your Class Meeting:** ● Welcome to week # 4 video ● Video on three-dimensional data ● Video on relational databases ● Video on controlled vocabularies **Do Before Your Class Meeting:** ● Look at your assigned Bates Mill cotton invoice, and make a plan for capturing its information in a relational database

Tuesday, March 9	**Watch Before Meeting With Your Partner:** ● Video on for-loops ● Video on for-loops in data frames **Complete and Submit by 11:59 PM:** ● Code-writing worksheet # 4
Wednesday, March 10	**Read (and take notes on) Before Your Class Meeting:** ● Jessica Marie Johnson, "Markup Bodies: Black [Life] Studies and Slavery [Death] Studies at the Digital Crossroads," *Social Text* 36, no. 4 (137) (2018): 57–79. ● Katie Rawson and Trevor Muñoz, "Against Cleaning," *Curating Menus* (blog), 2016. **Do Before Your Class Meeting:** ● Take notes on the reading. ● Complete the reading questions.
Thursday, March 11	**Complete and Submit by 11:59 PM:** ● Meet with classmates ● Respond to collaborative discussion prompt # 4 ● If you received Needs Work on CWW3 - revise it
Friday, March 12	**Nothing to do before class - come prepared to discuss what we've done so far, ask questions about data and programming concepts, discuss the Klein and D'Ignazio**
Sunday, March 14	**Complete and Submit by 11:59 PM:** ● Synthesis #4: Write a wordpress post of about 500 words reflecting on your learning for the week and proposing a question that you might address in your final project. The post should: ○ Propose a question that your final project will answer. ○ Describe the data you would require to answer this question. ○ Describe the ways in which you would structure that data in a relational database. ○ Describe the methods that you would use to answer your question.
Week 5 - Structuring Data for Analysis	
Monday, March 15	**Watch Before Your Class Meeting:** ● Welcome to week # 5 video ● Video on structuring data for regression and chi square tests ● Video on linear regression ● Video on chi square tests

	● Video on merging
Tuesday, March 16	**Watch Before Meeting With Your Partner:** ● Video on the merge() function in R ● Video on implementing linear regression in R ● Video on implementing Chi-Square tests in R **Complete and Submit by 11:59 PM:** ● Code-writing worksheet # 5 ● If you received Needs Work on Synthesis 3 - revise it
Wednesday, March 17	**Read (and take notes on) Before Your Class Meeting:** ● Sasha Costanza-Chock, "Design Justice: Towards an Intersectional Feminist Framework for Design Theory and Practice," June 3, 2018, https://papers.ssrn.com/abstract=3189696. **Do Before Your Class Meeting:** ● Take notes on the reading. ● Complete the reading questions.
Thursday, March 18	**Complete and Submit by 11:59 PM:** ● Meet with classmates ● Respond to collaborative discussion prompt # 5 ● If you received Needs Work on CWW 4 - revise it
Friday, March 19	**Read (and take notes on) Before Your Class Meeting:** ● Catherine D'Ignazio and Lauren Klein, "6. The Numbers Don't Speak for Themselves," in *Data Feminism* (PubPub, 2020), https://data-feminism.mitpress.mit.edu/pub/czq9dfs5/release/2. **Do Before Your Class Meeting:** ● Take notes on the reading. ● Complete the reading questions.
Sunday, March 21	**Complete and Submit by 11:59 PM:** ● Synthesis #5: Write a wordpress post of about 500 words commenting on your learning for the week, practice using one of our analysis methods, and move the final project forward. The post should: ○ Respond to any questions raised in the comments or in your group discussion, and revise your questions in light of those comments. (If you didn't get any questions, just write about your current plans for your final project) ○ Include a block of code that reads in data, structures that data, and completes either a t-test, chi-square test or a linear regression.

	■ If you undertake a chi square test you must:Use a for-loop to simplify a categorical column (i.e. convert towns to a boolean vector of in_cumberland, not_in_cumberland) and use that newly created column in your chi-square test ■ If you undertake a regression analysis you must: merge one or more tables to produce a table that has at least three numerical columns. Use those numerical columns in your regression analysis. ○ Interpret the results of that t-test, regression or chi-square test ○ Explicitly reference at least one reading from this week, and comment on how one (or both) methods discussed in the readings might help your final project.
Week 6 - Data Visualization	
Monday, March 22	**To Watch Before Your Class Meeting:** ● Welcome to week # 6 video **Read (and take notes on) Before Your Class Meeting:** ● Nathan Yau, "Designing with a Purpose" in *Visualize This* (Wiley 2011)
Tuesday, March 23	**Watch Before Meeting With Your Partner:** ● Customizing scatterplots in R ● Customizing histograms in R ● Heatmaps in R
Wednesday, March 24	**Read (and take notes on) Before Your Class Meeting:** ● Tahu Kukutai and John Taylor, eds., “Data Sovereignty for Indigenous Peoples: Current Practice and Future Needs,” in *Indigenous Data Sovereignty: Toward an Agenda*, vol. 38 (Anu Press, 2016). **Do Before Your Class Meeting:** ● Take notes on the reading. ● Complete the reading questions.
Thursday, March 25	**Complete and Submit by 11:59 PM:** ● Meet with classmates ● Respond to collaborative discussion prompt # 6 ● If you received Needs Work on CWW5 - revise it
Friday, March 26	**Read (and take notes on) Before Your Class Meeting:**

	● Catherine D'Ignazio and Lauren Klein, "3. On Rational, Scientific, Objective Viewpoints from Mythical, Imaginary, Impossible Standpoints," in *Data Feminism* (PubPub, 2020), https://data-feminism.mitpress.mit.edu/pub/czq9dfs5/release/3. **Do Before Your Class Meeting:** ● Take notes on the reading. ● Complete the reading questions. ● Look over the Learning Goals and Learning Objectives of this course. Take notes on whether you feel you have achieved each goal or objective, what work you think you have remaining to do to meet each goal or objective, and what you would like to learn more about.
Sunday, March 28	**Complete and Submit by 11:59 PM:** ● Synthesis #6: Write a wordpress post of about 500 words reflecting on your learning for the week. Your post should: ○ Comment on things you learned this week and things that changed your perspective on something you already knew. ○ Synthesize at least three readings from the course that will provide necessary background for your final project. ○ Write this post as if it were going to be read by an informed but non-expert. This should explain the theoretical or methodological significance of your project.
Week 7	
Monday, March 29	~~**Do Before Your Class Meeting**~~**:** ~~● Look over the Learning Goals and Learning Objectives of this course. Take notes on whether you feel you have achieved each goal or objective, what work you think you have remaining to do to meet each goal or objective, and what you would like to learn more about.~~ **Open appointments with me for final project consultations.**
Tuesday, March 30	**Open appointments with me for final project consultations**
Finals Period	

Friday, April 2	**To be done during our scheduled class time:** ~3 minute presentations on your final project**.** **Due by 11:59 PM:** ● URL for final project website ● If you received Needs Work on CWW 6 - revise it ● If you received Needs Work in synthesis 6 - revise it