**ENG ####: Data and Writing Toward Social Change**

ENG XXXX  
Room XXXX  
Meeting time: XXXX

Professor   
@XXXX.edu   
Office:, Drop-in hours: XXXX  
(Feel free to email me to set up another time to meet)

This course focuses on critical evaluation of data in application to writing projects that you will produce in class. We will explore questions such as: What counts as “data”? Who decides? Are data “neutral”? What is the range of possibilities to communicate and write with data? What are important rhetorical considerations at all stages of the lifecycle of data (e.g., collection, cleaning, analysis, interpretation, communication)? What is the “status quo” of data and how does that include and exclude marginalized groups like women, people of color, disabled people, and LGBTQ people? You will get practice working with data-driven texts produced by others (e.g., academics, journalists) and basic descriptive statistics to consider various rhetorical considerations in creating data-driven arguments and narratives in a variety of genres for a variety of audiences. No expertise in data science or statistics is required or expected. However, if you have coursework in those and related fields, you can apply what you have learned elsewhere in writing projects for this class.

**Learning Goals: By the end of this course, you should be able to**

* Demonstrate an understanding of how data are created, who creates data, and what limitations particular data have in relation to arguments and narratives you can write.
* Ask critical questions of data we encounter, especially in terms of ethical considerations for what data purports to represent and limitations in the arguments and narratives we can make with data in our writing.
* Identify how finding, cleaning, maintaining, sorting, filtering, comparing, and analyzing data have rhetorical consequences in writing.
* Create critically informed and persuasive arguments and stories that are well supported by analyses of data (e.g., considerations of accuracy, accessibility, style, organization, visualization).

**Required texts:**

The following readings are available on LMS/DigitalRepository or via hyperlink:

* D’Ignazio, Catherine and Lauren F. Klein. 2020. Data Feminism. Cambridge, MA: MIT Press. Free version at: <https://data-feminism.mitpress.mit.edu/>
* Au, Randy. 2020. “Data Cleaning IS Analysis, Not Grunt Work: Also, Most Data Cleaning Articles Suck.” *Counting Stuff*. <https://www.counting-stuff.com/data-cleaning-is-analysis-not-grunt-65949948516031001b3512e5/>
* Fahnestock, Jeanne. 2011. “Amplification.” In *Rhetorical Style*.
* National Center on Disability and Access to Education. 2007. “Tips and Tools: Principles of Accessible Design. <https://ncdae.org/resources/factsheets/principles.php>
* Color Matters. 2024. “Basic Color Theory.” [Basic Color Theory (colormatters.com)](https://www.colormatters.com/color-and-design/basic-color-theory)
* DeVoss, D. and J. Ridolfo. 2009. “Composing for Recomposition: Rhetorical Velocity and Delivery. *Kairos*. <https://kairos.technorhetoric.net/13.2/topoi/ridolfo_devoss/intro.html>

**Major Projects and Grade Breakdown:**

* **Short assignments** (5%)  
  (sometimes due in class; sometimes for homework)
* **Literacy and Numeracy Narrative** (5%)  
  A short narrative that explores your history with reading, writing, mathematics and other domains of knowledge that would relate to working with data.
* **Data Set Critical Biography** (15%)  
  Using what we learn in the first few weeks of the course, you will ask questions of the data set you chose to work with in order to write a history of it in terms of: who created it, how the data were created, what the data are supposed to represent, how these claims for representation may be limited, possible flaws in collection or categorization, possible unintended consequences created by the data set’s existence, a range of possibilities for analysis, etc. This “biography” will be created by answering a series of questions that helps you make sense of a fuller set of contexts for the data set and, thus, how to start thinking about ethically sound and just uses of that data set. This biography will be 3-5 pages long.
* **Data-Driven Argument** (25%)  
  This project is driven by data-driven arguments about your topic from secondary research from others (e.g., academics, journalists, industry experts, activists) as well as at least one descriptive statistic you calculate from your data set (where you consider, also, its limitations in your writing). You will have the option of writing a white paper, a long-form nonfiction essay, or another genre of your choosing and approved by your instructor. A white paper details the historical conversation in various research communities about the topic researched in order to inform interested parties making decisions related to the topic. A long-form nonfiction essay will be something like an opinion piece on a news site or blog, but a bit longer and more well-researched. No matter what genre you choose, you will be required to: include at least **3** secondary sources that also contain qualitative and/or quantitative data analyses, at least one descriptive statistic calculated from your data set (along with considering its limitations), and at least one data visualization that you create based on your data set. This assignment should be 2,000-2,500 words.
* **Campaign for Circulation** (30%)  
  Using statistics and other information generated from your Data Set Critical Biography, Data-Driven Argument, secondary research, and/or other work you have done during the semester, you will craft a campaign of writing to the public about your topic driven by data you have analyzed. The campaign will take the form of a report that contains explanation of the rationale for your campaign, examples of the type of texts you would hypothetically produce, rationales for their use (e.g., audiences you want to reach, platforms best suited for circulation, consistent themes in messaging), and, finally, two fully-completed texts that would be used in your campaign (e.g., a flyer, a data visualization composed for Instagram, a webpage, an op-ed). At least one of these texts will be a revision of your data visualization from your Data-Driven Argument *or* a new visualization. Excluding the two fully-completed campaign texts, the campaign for circulation assignment should be at least 1,500 words.
* **Final Reflection** (20%)  
  A brief narrative that reflects on the work you have done during the semester, what you are proud of, what you would like to keep working on, and the kinds of work you want to do in the future. This should be at least 1,000 words long.
* Details for all assignments will be distributed well in advance of deadlines. All assignments must be turned in to pass the course.

**COURSE POLICIES**

[insert policies as appropriate to your institution]

**Course Schedule**

All assignments are due on the day they are listed.

*Please note*: reading assignments and due dates may be subject to change depending on our collective pace. Be sure to attend class regularly to stay informed. Any changes to deadlines will be made in writing over email and on the course website.

**Unit 1: Critically Reading and Processing Data**

**Week 1**

*Wednesday August 28*

* Introduction
* Analyzing rice consumption activity for thinking about data, writing, difference, and context.

**Week 2**

*Monday September 2 - No Class*

*Wednesday September 4 —Feminist Perspectives on Data Science*

* D’Ignazio and Klein, “Introduction: Why Data Science Needs Feminism” in *Data Feminism*

**Week 3**

*Monday September 9 – Power and Data*

* D’Ignazio and Klein, “The Power Chapter,” in *Data Feminism*
* **Short assignment #1:** Using Collins’ matrix of domination from the D’Ignazio and Klein reading, find a news article online that cites statistics and apply the matrix to some aspect of the use of the statistic. Explain the connection in about 250 words.

*Wednesday September 11 – Asking Critical Questions of Data*

* D’Ignazio and Klein, “Collect, Analyze, Imagine, Teach” in *Data Feminism*
* Literacy and Numeracy Narrative

**Week 4**

*Monday September 16 – Consultations*

* Class cancelled for 1-on-1 meetings on finding data sets to work with and semester-long writing projects

*Wednesday September 18 – Asking Critical Questions of Data*

* D’Ignazio and Klein, “What Gets Counted Counts” in *Data Feminism*

**Week 5**

*Monday September 23 – Asking Critical Questions of Data*

* **Major Assignment 1:** Draft 1 of Data Set Critical Biography

*Wednesday September 25 – Cleaning or(and?) Analyzing Data*

* Au, “Data Cleaning IS Analysis, Not Grunt Work.” <https://www.counting-stuff.com/data-cleaning-is-analysis-not-grunt-65949948516031001b3512e5/>

**Week 6**

*Monday September 30 – Cleaning or(and?) Analyzing Data as Rhetorical*

* D’Ignazio and Klein, “Unicorns, Ninjas, Wizards, and Rock Stars” in *Data Feminism*

*Wednesday October 2 —No class*

**Unit 2: Using Data to Argue and Tell Stories Toward Social Change**

**Week 7**

*Monday October 7 – Genres, Style, and Data-Driven Writing*

* **Major Assignment 1:** Final Draft of Data Set Critical Biography

*Wednesday October 9 — Standpoints in Data Analysis and Writing*

* D’Ignazio and Klein, “On Rational, Scientific, Objective Viewpoints from Mythical, Imaginary, Impossible Standpoints” in *Data Feminism*
* **Short assignment #2:** Have you ever been suspicious of someone who claimed they were being objective or neutral? Why? If not, why not? What is rhetorically important about these considerations? Respond in about 250 words.

**Week 8**

*Monday October 14 - No Class*

*Tuesday October 15 - Follows Monday Schedule – Making Data-Driven Writing Interesting*

* Choose one of three data journalism pieces from [USA Today](https://www.usatoday.com/pages/interactives/asbestos-sharia-law-model-bills-lobbyists-special-interests-influence-state-laws/), [FiveThirtyEight](https://fivethirtyeight.com/features/its-time-to-stop-pretending-that-the-nfl-preseason-isnt-pointless/), and [Buzzfeed News](https://www.buzzfeednews.com/article/craigsilverman/facebook-fake-news-hits-2018). Read it and be prepared to discuss what intrigued you most as a reader, why, and how moments of quantification were accessible to you.
* **Proposal for Data-Driven Argument**

**Unit 3: Public Arguments and the Circulation of Rhetoric**

*Wednesday October 16 – Communicating Context*

* D’Ignazio and Klein, “The Numbers Don’t Speak for Themselves” in *Data Feminism*

**Week 9**

*Monday October 21 – Using/Writing Methods*

* **Short Assignment #3:** write a recipe for a favorite meal and/or create a set of instructions for playing a game you enjoy. In about 250 words, explain how this is or is not like showing readers how and why a writer analyzed data in the way they did.

*Wednesday October 23 - Amplification and Quantitative Rhetoric*

* Fahnestock, “Amplification,” in *Rhetorical Style*

**Week 10**

*Monday October 28- Making Comparisons and Quantitative Rhetoric*

* **Short Assignment #4:** Find a news article or another source that uses statistical or data-driven claims. Use Fahnestock’s explanation of Quintilian and Erasmus’s methods of amplification to amplify up and also to bring it down. Explain what you like best of the original or one of your two revisions in about 250 words.

*Wednesday October 30 – Using Examples in Data-Driven Writing*

* **Major Assignment 2:** First Draft, Data-Driven Argument

**Week 11**

*Monday November 4 – Design and Accessibility*

* NCDAE, “Principles of Accessible Design” <https://ncdae.org/resources/factsheets/principles.php>
* “Basic Color Theory”, <https://www.colormatters.com/color-and-design/basic-color-theory>

**Unit 3: Circulation of Data-Driven Arguments**

*Wednesday November 6 – Traditional Methods of Data Visualization: Tables*

* **Proposal for Campaign for Circulation**

**Week 12**

*Monday November 11 – Traditional Methods of Data Visualization: Charts*

* None

*Wednesday November 13 – Non-Traditional Methods of Data Visualization*

* **Major Assignment 2:** Final Draft of Data-Driven Argument

**Week 13**

*Monday November 18 – Statistics and Circulation*

* DeVoss and Ridolfo, “Compositing for Recomposition: Rhetorical Velocity and Delivery, *Kairos*, [Kairos 13.2: Ridolfo and DeVoss, Composing for Recomposition -- Introduction (technorhetoric.net)](https://kairos.technorhetoric.net/13.2/topoi/ridolfo_devoss/intro.html)

*Wednesday November 20 – Workshop on Data Visualization Software*

* Get set up on at least one of the recommended programs for data visualization made available on our course website.

**Week 14**

*Monday November 25 – Affordances of Different Modes of Expression*

* **Major Assignment 3:** Campaign for Circulation first draft is due

*Wednesday November 27 — No class*

**Week 15**

*Monday December 2 – Peer Feedback*

* Bring drafts of your Campaign for Circulation to exchange with peers for review

*Wednesday December 4 – Writing Workshop*

* None

**Week 16**

*Monday December 9 – Writing Workshop & Reflection*

* **Short Assignment #5:** Choose something a writer did that you really liked from the peer review day two classes ago or the writing workshop from last class. What did you like about it? Why? How did it relate to principles surrounding data, critical data literacy, quantitative rhetoric, and other concepts we have learned in class? Explain in 250 words.

*Wednesday December 11 – Theories of Data-Driven Writing*

* Bring in-progress draft of Final Reflection

*Monday December 16*

* **Major Assignment 3: Final Draft of Campaign for Circulation**

**Due for Final (December 22): Major Assignment 4: Final Reflection**