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Office Hours: Tues/Thurs (in-person) 2-3pm and via zoom by appointment

**English 114: The Rhetoric of Data (revised for CIM)**

**Overview**

Today no concept more directly guides the way we move through the world than that of data. The way we choose to watch a movie, find an article for a research paper, like a friend’s post on social media or even get the answer to a question are all fundamentally shaped by the principles of data. This course brings together rhetorical theory and digital humanities to explore how the notion of data came to shape so much of contemporary human life. Rhetoric is much more than logos, pathos and ethos. It is the complex system of communicating that we use to generate meaning, which includes extracting knowledge from data as a form of persuasion. As such, rhetorical analysis helps us understand how arguments are made with data as well as how many of us become comfortable with giving so much of our own data away.

The course will begin with an exploration of the concept data and then move to applying these concepts in a hands-on project in which students will create a corpus of material from the poetry of George Moses Horton in order to analyze it with computational methods used in the digital humanities. George Moses Horton (1797?-1867?) was one of the first African Americans to publish a work of poetry in the United States. As an enslaved man held at a farm near Chapel Hill, he wrote about his experiences, including his many efforts to gain his freedom, together with his view of students at UNC and more general ideas of love and life. In so doing, students will see first-hand the role of rhetoric in constructing and analyzing data. Moreover, they will contribute the knowledge on Horton who is a central figure in both UNC history and African American poetry.

This course is especially well suited for those in the Writing, Editing and Digital Publishing (WEDP) concentration in English & Comparative Literature as well as those who are interested in fields such as data science, social media, technical communication, and digital humanities. **Additionally, this course fulfills a core requirement in the new data science minor.**

Learning Outcomes:

* Explain basic practical and theoretical definitions of the terms rhetoric, digital media, information, and data
* Trace the development of the concept of data in the digital age and explain how arguments based on data analysis are rhetorically constructed.
* Identify power structures involved in constructing arguments with data
* Create a data driven project based on an informed understanding of contemporary rhetorical theories of data analysis and visualization.
* Evaluate primary and secondary sources to assess validity as evidence
* Reflect critically on your ability to employ different modalities of composition
* Conduct peer reviews of classmate’s data and written work

**Ways of Knowing Focus Capacity**

As this course uses rhetorical theory and computation methods from digital humanities to analyze how the concept of data is used to create knowledge, this course also fulfills a focus capacity of Ways of Knowing for the IDEAS in Action Curriculum. The learning outcomes of this focus capacity are:

* Recognize and use one or more approach/es to developing and validating knowledge of the unfamiliar world
* Evaluate ways that temporal, spatial, scientific, and philosophical categories structure knowledge.
* Interrogate assumptions that underlie our own perceptions of the world.
* Employ strategies to mitigate or adjust for preconceptions and biases.
* Apply critical insights to understand patterns of experience and belief.

**Sites/Programs used:**

**Trello** <https://trello.com/>

Trello is a project management software that we will use to manage class assignments –

You will sign-up for this free software in class. (Note: you are welcome to create an anonymous account if you desire).

**Sakai**

Our Sakai site will primarily be used for posting assignments, grades, and signing up for office hours.

**Required Texts:**

All readings will be posted on trello.

**Mask Policy**

This semester, while we are in the midst of a global pandemic, all enrolled students are required to wear a mask covering your mouth and nose at all times in our classroom. This requirement is to protect our educational community — your classmates and me – as we learn together. If you choose not to wear a mask, or wear it improperly, I will ask you to leave immediately, and I will submit a report to the [Office of Student Conduct](https://cm.maxient.com/reportingform.php?UNCChapelHill&layout_id=23).  At that point you will be disenrolled from this course for the protection of our educational community. Students who have an authorized accommodation from Accessibility Resources and Service have an exception.  For additional information, see [Carolina Together](https://carolinatogether.unc.edu/).

**Face-to-Face with Flexibility**

As we continue to deal with the global pandemic, we will need to be flexible in order to adjust to unforeseen circumstances. We will usually meet in our scheduled classroom at our scheduled time, but in some circumstances, we may have an occasional remote class via zoom. If such a need arises, I will notify you ahead of time and provide the necessary zoom link.

**Grading:**

|  |  |
| --- | --- |
| Blogs | 20% |
| Participation | 10% |
| Midterm exam | 25% |
| Data Analysis Project | 25% |
| Final Presentation | 15% |
| Attendance | 5% |
| Total | 100% |

A = 100-93 B = 86-83 C = 76-73 D = 66-60

A- = 92-90 B- = 82-80 C- = 72-70 F = 59-below

B+ = 89-87 C+ = 79-77 D + = 69-67

**Participation:**

Your participation grade includes being prepared with all materials, completing in-class assignments, as well as being actively engaging with your working group, attentiveness, and staying focused on course material (not web surfing).

**Late work:**

Each writing assignment will involve research, drafting, and revision. Because writing is a recursive, unpredictable, and multi-step process, careful advance planning is essential to avoid falling behind. Late work—whether it is homework, a draft for a workshop day, or a project—will be penalized.

Unless alternative arrangements are made, all other graded assignments lose half a letter grade per day after the due date.

**Attendance Policy:**

The unique workshop format of English 190 necessitates constant attendance and participation. If you miss a class, your absence will have a detrimental effect on the ability of our group to function. Therefore, attendance is mandatory. You are allowed **FOUR** absences without it negatively affecting your grade. After 4 absences, your attendance grade is lowered by 15% for each class missed.

If you miss a class, you must email me beforehand to let me know of your absence. In this email, you must inform me which of your classmates will serve as your note taker (of course you must also get their permission to do so). Additionally, you will be responsible for all missed work. In this email, please do not ask me if we “missed anything important” while you were absent – I believe that each class is important.

**Sickness**

As we are in the midst of global pandemic, please let me know if you are unable to come to class because you are sick. We will make alternative arrangements to get you caught. Under no circumstances, should you come to our face-to-face meeting feeling sick as this could endanger those around you.

**Netiquette**

Professionalism is expected throughout this course, this includes proper netiquette, which is a word for courteous online communications. In other words, let's be polite; ask questions instead of making accusations. Inappropriate behavior can impact your grade and/or result in withdrawal from the course. This covers all communications including working with your peers in peer-review, direct messages and emails to both instructors and students, and discussion boards on trello and zoom chat.

Discussion boards are one important way for a writing class to create a community. In this course, they can act as a way to discuss lectures and readings, display parts of your work, and share other activities. They are the best way to develop relationships with your peers despite the distance of online learning. Professionalism and focus is expected. If the conversation gets too off topic, you can request an off-topic channel.

**Email Correspondence:**

This class focuses on how technologies and technical formats for writing affect rhetorical content, so you need to be mindful of your own use of email. Consider email for what it is— an epistolary form of text-based communication. Craft your emails to me and to other students accordingly: with respect and with respectful use of language. This means that the email must include a subject line, an address, thoughtful and respectful prose in the body paragraph, and a signature. Also, although email is a nearly instantaneous mode of communication, do not expect my responses to be so. Do not expect me to respond within 24 hours to any email and certainly not one sent on the eve of a deadline; this means that you need to plan in advance in order to receive the kind of feedback and attention you need before deadlines approach.

**Formatting**

All of your papers (drafts and final copies) must adhere to appropriate APA style and format guidelines for the genre and discipline you are writing. We will discuss these guidelines and examine models in class. **Additionally, when saving documents (when you first ‘save as’ on your computer) for homework and papers make sure to title it Last Name – Assignment – draft #.**

**Technology**

At a minimum, you must check your email and our class trello site daily for messages and updates. Bring your laptop or table *to every class*. **Please make sure that your laptop is working properly, with the battery charged, *before* coming to class.** Make good choices about appropriate laptop use during class. If I see you working on work from another class or visiting sites not relevant to class, you will lose participation points.

**The Honor Code:**

The honor code applies to everything that you—and I—do at this university, including our use of outside sources in our research and writing. Our work in this class will conform to the principles and procedures defined in the Instrument of Student Judicial Governance (http://instrument.unc.edu/). The research that we do this semester, whether primary or secondary, print or online, formal or informal, will require careful documentation on your part. We will review citation guidelines early and often throughout the semester. The need to cite your sources applies to all your work, including drafts as well as final versions of your feeders and projects. When in doubt: CITE.

If I suspect you of plagiarizing all or part of a paper, even unintentionally, I am required to report the offense to the Honor Court. If you think you are running into trouble with a paper, PLEASE come and speak with me. It is much, much better to take a late penalty on an assignment than to risk Honor Court proceedings.

**Students with Disabilities**

The University of North Carolina at Chapel Hill ensures that no qualified person shall by reason of a disability be denied access to, participation in, or the benefits of, any program or activity operated by the University. In compliance with UNC policy and federal law, qualified students with disabilities are eligible to receive “reasonable accommodations to ensure equal access to education opportunities, programs, and activities” (http://www.unc.edu/depts/lds/faculty-policies.html). If you anticipate such accommodations, please notify me as soon as possible so that appropriate arrangements can be made. Additionally, you may seek out student support services at the Department of Disability Services (DDS) (http://disabilityservices.unc.edu/) and through the Learning Center (http://learningcenter.unc.edu/)

**Non-Discrimination Policy:**

This classroom should be a safe space. This university does not discriminate against its students or employees based on race, color, national origin, religion, sex, age, or disability. In this class we will strive to maintain an open atmosphere with shared respect for all differences.

Acts of discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, stalking, and related retaliation are prohibited at UNC-Chapel Hill. If you have experienced these types of conduct, you are encouraged to report the incident and seek resources on campus or in the community. Please contact the [**Director of Title IX Compliance / Title IX Coordinator**](mailto:titleixcoordinator@unc.edu), [**Report and Response Coordinators**](mailto:reportandresponse@unc.edu), Counseling and Psychological Services (CAPs) (confidential) in Campus Health Services at (919) 966-3658, or the [**Gender Violence Services** **Coordinators**](mailto:gvsc@unc.edu) (confidential) to discuss your specific needs. Additional resources are available at [**safe.unc.edu**](http://safe.unc.edu/).

**Writing Center:**

The UNC Writing Center, located in SASB North and in Greenlaw Hall #221, offers free tutoring services for students. You may visit the Writing Center to ask for help with a specific paper, whether you are concerned with developing ideas and content, organizing your assignment, or working on style issues. To make an appointment, browse the Writing Center's online resources, or send a draft online, please go to (http://www.unc.edu/depts/wcweb/). To make best use of your time there, please bring a copy of your assignment sheet and your draft with you. The Writing Center will not proofread papers or talk with you about grades.

**Course Policies:**

Please remember that the syllabus functions as a contract between instructor and students. We will go over these policies during the first few days of class, but you are responsible for knowing and abiding by these policies.

You should come to class having prepared the assigned reading, writing, or other homework, and you should be ready to engage with your classmates and the text(s) at hand.

**Assignments**

**Blogs:**

In order to facilitate discussion and help you grapple with theories and concepts in the reading, you will employ an innovative approach to blogging developed by Mark Sample (Davidson) and Lauren Klein (Emory).

I will divide the class into two blogging groups. Each blogging group will rotate through the following roles each week:

**Bloggers:** This is akin to the standard blog post assignment: a 200-400 word response to the week’s materials. There are a number of ways to approach the “first reader” response: consider the week’s material in relation to its historical or theoretical context; write about an aspect of the week’s material that you don’t understand, or that you don’t agree with; formulate an insightful question or two about the material and then attempt to answer your own question; or another line of inquiry of your own choice.

Include at least one direct quote from the text with an analysis of it. You CANNOT use a quote that has already been used. This means you will need to skim the other blogs posted before you. First readers are responsible for posting their response to the class blog by **Monday at 12:30pm (24 hours BEFORE the class meets).**

**Respondents**: Students in this group build upon, disagree with, or clarify the first readers’ posts. Respondents are required to comment on at least ONE post, in comments of around (or longer than) a 150-200 words. These students should bring in additional quotes from the text to make their argument and/or relate their ideas to relevant online resource (broadly conceived). You CANNOT use a quote that has already been used. This means you will need to skim the other blogs posted before you. **Response comments are due by our class meeting time.**

Each week, you will write one blog and one blog response. At the completion of each one-week cycle, you will receive a grade on the basis of your contributions. Students seeking additional feedback on their blogging assignments should schedule a meeting with the professor during her office hours.

**Grades for Blogs:**

Your blogs and responses will receive a grad 1-3.

3 = excellent post – critical engagement with course material or fellow student’s idea that provided a clear argument with sufficient evidence. The post did not just repeat the same idea made by others earlier in the thread.

2 = good post – some engagement with course material or fellow student’s ideas with a passing reference to evidence.

1 = unsatisfactory post – brief comment that referenced other ideas in the thread without a clear reference to the course material.

0 = no post given.

**Midterm Exam**

The midterm will consist of identification, short answer, and short essay. It will cover the reading and lecture material from the first half of class. Please bring one blue book to class on the date of the midterm

**Final Archival Project**

To apply what we have learned about the intersection of rhetoric, data science, and digital humanities, we are going to complete a project that centers George Moses Horton’s poems. George Moses Horton (1797?-1867?) was one of the first African Americans to publish a work of poetry in the United States. As an enslaved man held at a farm near Chapel Hill, he wrote about his experiences, including his many efforts to gain his freedom, together with his view of students at UNC and more general ideas of love and life. His works are integral to the history of UNC, but because they are not in one single collection (or what a data scientist would call a corpus) nor in a machine-readable format, many types of research including computational analysis are impossible. To remedy this significant problem, we create will create a single corpus of Horton’s poems that are machine readable and then identify possible research questions that could be pursed in the future. Below are the steps we will take in this project: (1) data construction, (2) data visualization, (3) presentation, (4) reflection essay.

1. **Data Construction**
   1. Clean plain text version of archival poems
      1. With your group, you will create plain text versions of selected handwritten poems that are in the archive.
      2. Due: Thurs, November 4th
   2. Structured data in spreadsheet
      1. As a class, we will create a spreadsheet that consists of the structured data gathered from the Horton poem corpus. Each group will be given certain parts of the data to ‘clean’.
      2. Due: Rough draft (1st pass): Tues. Nov 9; Final draft: Thurs. Nov. 11
2. **Data Visualization**
   1. Computational visualization
      1. Once we have our cleaned data, you will create at least one computational data visualization to explore the collection. You will use this data visualization in your presentation (see below.)
      2. Due: Nov. 16
   2. Hand-drawn visualization
      1. To supplement your computationally created data visualization, you will employ the data humanism approach discussed by Lupi to create a hand-drawn visualization. You will use this data visualization in your presentation (see below.)
      2. Due: Dec. 3 (with your final presentation)
3. **Final Presentation**
   1. Before beginning a major research project, scholars often present a detailed research plan that outlines the steps they will take to complete the project. Scholars use this to apply for grants to acquire the necessary funds and resources for the project. In your final presentation in the course, you will present a research plan using the Horton data we have collected so far. The presentation will occur during our final exam period. You will create a powerpoint presentation to provide visuals alongside your presentation. **You will have 4-6 minutes to give your presentation. I will be very strict with the time limit. At the 6-minute mark, I will announce that your time is up.**

The presentation of your research plan should consist of the following:

* + 1. **Research question**

When crafting this question consider Horton’s poetry and its place in history. You may want to think about how he uses particular themes in his poetry or different poetic styles he uses. You could also consider differences between the manuscript and published work.

You may find it useful to skim scholarly papers about his work, some of which you can find [here](https://drive.google.com/drive/folders/1iK3hPriaJ7CgcfiIUP_mPB52QqSQRP2c?usp=sharing). Feel free to add others that you find to this folder, so that it can serve a resource for your classmates.

When presenting your research question, explain why you chose your research question and found this to be an interesting topic to study. You may need to briefly discuss background information on Horton to emphasize the importance of your question.

* + 1. **Methods**

Once you created a research question, your research plan will need to explain the methods you will use to answer the question. Your methods section will largely pull from the methods we executed in class together (creating a corpus, a structured data set, and text analysis). You may choose to use the entire corpus we created (the poems from the published books and manuscripts) or a subset of that corpus – your decision will be determined by your research question, and how much you want to manipulate the existing data and codes.

In the presentation, you will need to explain:

* what material your corpus contains,
* how you turned that corpus into data,
* how you structured that data
* how you plan on analyzing the data, i.e. text analysis
  + 1. **Preliminary data visualizations**.

After describing your methods, you will need to show your audience two preliminary data visualizations – one you will create through computational means and the other will be created by hand. Your computational data visualization does not need to be overly elaborate; it may be a bar or line graph. We will work on these in class. On the other hand, your hand drawn visualization is a chance to emphasize Lupi’s data humanism approach, so you may want to be creative in your thinking. Both graphs need to directly correspond to your research question.

* + 1. **Potential Impact of the Research**

After showing your data visualizations, you should discuss how the data might impact our understanding of Horton’s work. For example, will the data help us understand the influence of scripture on his work, or how he used metaphors to freedom, the most common topics he wrote about, different topics he discussed in each of his publications, interesting trends in his poetic style, etc.?

Imagine that you have been given an entire semester to use the data you have created on Horton’s poems to complete a research project. Your final project of the class will consist of a presentation of a detailed research plan that describes what this project would do. You will give this presentation during the final exam period (Dec. 3 at 12pm) for our class. (You will receive a more detailed handout on the presentation). The research plan will consist of:

* One **research question**
* **T**he **methods** you would use to answer this question, and the corresponding **data**. Here you will pull from the work you did on creating the corpus and structured data.
* Preliminary **data visualizations**. Here you will bring in the 2 visualizations (computational and hand-written) that you created
* A discussion of the **impact** that this research might have on understanding Horton’s poetry and legacy.
  + 1. You will have a rough draft of this presentation due on Nov. 23 for peer review

1. **Reflection Essay**
   1. Together with your presentation, you will hand in a reflection on your experiences with this project that connects what you have done with several readings that we completed in the first part of the class. You will receive more detailed handout on this reflection paper. The reflection is due during our final exam period on Dec. 3 at 12pm.

**Course Calendar**

\*\*\*Below is our course schedule. It includes the general topics we will cover in class and important due dates for major assignments. However, this is a general guideline; a more detailed and up-to-date schedule will be on Trello.

|  |  |  |
| --- | --- | --- |
| Week | Tuesday | Thursday |
| 1 |  | August 19  Introduction  Get to know youhandout on [qualitrics](https://unc.az1.qualtrics.com/jfe/form/SV_beflTHxyzdcUqHA)  **Register for trello**  Homework:  The Rhetorical Tradition by Lunderg and Keith from The essential guide to rhetoric. Boston : Bedford/St. Martin’s.]  Backpacks vs. Briefcases: Steps toward Rhetorical Analysis |
| 2 | August 24  What is Rhetoric?  Homework:  Hess – digital rhetoric  Due: Blog and Blog Response | August 26  What is Digital Rhetoric?  Homework:   * Klein and Posner, “Data” * Lanius and Hubbell, The New Data Argumentation amid, on, with, and in Data   Due: Blog and Blog Response |
| 3 | August 31  What is Data?  Homework:  Blown to Bits, Chap. 4, “Needles in the Haystack,"  Due: Blog and Blog Response | September 2  Searching for Information  Homework:  Reyman, Rhetorical Agency of Algorithms  Due: Blog and Blog Response |
| 4 | September 7  Algorithms  Homework:  Maher, Burgess and Menizies – Good Computing with Big Data  Due: Blog and Blog Response | September 9  Big Data  Homework:  Giorgia Lupi, “Data Humanism, The Revolution will be Visualized.”  Due: Blog and Blog Response |
| 5 | September 14  Visualizing Data  Homework:  Selections from Data Feminisms by Katherine D'Ignazio and Lauren Klein  Due: Blog and Blog Response | September 16  Visualizing Data  Homework:  Blair-Milligan - “Archives”  Due: Blog and Blog Response |
| 6 | September 21  Data and Archives  Homework:  Rawson. The Rhetorical Power of Archival Description: Classifying Images of Gender Transgression  Due: Blog and Blog Response | September 23  Data and Archives  Homework:  Duarte and Belarde-Lewis. “Imagining: Creating Spaces for Indigenous Ontologies.”  Due: Blog and Blog Response |
| 7 | September 28  The Power to Name and Organize  Homework:  “Data Scholarship in the Humanities” Christine Borgman (available online via library)  Due: Blog and Blog Response | September 30  Digital Humanities Methods  Homework:  Jessica Marie Johnson, “Markup Bodies: Black [Life] Studies and Slavery [Death] Studies at the Digital Crossroads  Due: Blog and Blog Response |
| 8 | October 5  [gone to FSU]  Data creation  Homework:  Against cleaning <http://curatingmenus.org/articles/against-cleaning/>  Due: Blog and Blog Response | October 7  Data creation  Due: Blog and Blog Response |
| 9 | October 12  Midterm Review | October 14  Midterm  HW: On the Books Modules 00 (Introduction) and 01 (What is an Algorithm?) |
| 10 | October 19  Reviewing On the Books Project  HW: Have a nice break | October 21  NO CLASS – FALL BREAK |
| 11 | October 26  Archive Visit – Selecting and Scanning Material  HW: On the Books Module: (03) Making a Corpus Computer Readable | October 28  OCR – Making your Archival Material Machine Readable  HW: On the Books Module: (04) How to OCR with Python & Tesseract |
| 12 | November 2  Cleaning Data  HW: On the Books Module (05) Structuring OCR’ed Text as Data | November 4  Structuring Data  HW: On the Books Module (06) Exploring Structured Data from OCR’ed Text |
| 13 | November 9  Exploring Data | November 11  Exploring Data |
| 14 | November 16  Research Plan Preparation | November 18  Research Plan Preparation |
| 15 | November 23  Final Project Rough Draft Due for Peer Review | November 25  NO CLASS - BREAK |
| 16 | November 30  Class Wrap-Up and Evaluations | Final – Friday Dec 3 at 12:00pm  Final Project and Presentation Due |