Georgia Institute of Technology
School of Literature, Media, and Communication

LMC 3314 (Spring 2018)
Technologies of Representation: Data
T/Th 3-4:15pm, Clough Commons 129

Professor: Lauren Klein (lauren.klein@lmc.gatech.edu)
Office Hours: Tuesdays 2-3pm, Skiles 359 (and by appointment)
Course Website: http://blogs.iac.gatech.edu/data18/

Course Prerequisites
ENGL 1102

Core Area
Humanities

Course Description
Data has been called "the new oil," a comparison that emphasizes how data functions as the raw material that drives the digital economy—and, consequently, much of twenty-first century life. But unlike oil, data does not exist in a natural state. Even before a dataset is first collected, it is influenced by people—often with social and political agendas of their own. This course thus examines how information becomes data, in terms of its technical requirements as well as in terms of the social and political contexts that surround it. Through a series of examples, accompanied by readings from the emerging field of data studies, we will explore the significance of data, past and present. We will also explore how visualization has been employed in order to enhance data's social, political, and rhetorical force. We will work towards final projects focused on visualizations of Georgia state data, using the recently rediscovered visualizations of W.E.B. Du Bois as our point of departure. Through classroom discussion, lab exercises, and several guest lectures, we will emerge with a deeper understanding of the power of data, as well as its constraints.

Learning Outcomes
- Students will learn to read, analyze, and interpret not only cultural projects such as film, literature, art, and new media, but also scientific and technical documents;
- They will become familiar with a variety of social, political, and philosophical theories and be able to apply those theories to creative and scientific texts, as well as to their own cultural observations;
- They will create digital artifacts with an awareness of history, audience, and context;
- They will work effectively in teams to accomplish a common goal; and
- They will communicate information and ideas to a range of audiences.

Required Course Materials:
Required readings posted on Canvas.

List of Graded Assignments
Your grade for the course will be calculated as follows:
- Participation and quizzes: 10%

- Blogging assignments: 25%
- Midterm project: 25%
- Final project: 40%

This chart of grading characteristics, adapted from criteria developed by Professor Mark Sample of Davidson College, describes the general rubric I employ when evaluating student work:

GRADE	CHARACTERISTICS
A	**Exceptional**. The work is focused, and coherently integrates examples with explanations and analysis. The work demonstrates awareness of its implications and/or limitations, and it considers multiple perspectives when appropriate. The work reflects *in-depth* engagement with the topic.
B	**Satisfactory.** The work is reasonably focused, with explanations and/or analysis that derive from specific examples. Fewer connections are made between ideas, however, and while new insights are offered, they are not fully developed. The work reflects *moderate* engagement with the topic.
C	**Underdeveloped.** The work is mostly description or summary, without consideration of alternative perspectives, and few connections are made between ideas. The work reflects *passing* engagement with the topic.
D	**Limited.** The work is unfocused, or simply rehashes previous comments, and displays *no evidence of student engagement* with the topic.
F	**No Credit.** The work is missing or consists of one or two disconnected sentences/links/etc.

Description of Graded Assignments
Reading Assignments
You will be reading a wide range of texts—some written clearly, some more dense; some short, some long. Because these texts will inform our classroom discussions—and what you, in particular, have to contribute—it is absolutely essential that you stay on top of the reading assignments and complete them before the start of each class. Reading assignments are assessed through classroom participation, as well as the occasional quiz.

Blogging Assignments
In effort to stimulate classroom discussion, as well as to allow you to introduce new material into the course, we will employ an innovative format for class blogging. During the second week of the course, I will divide the class into four blogging groups. Each blogging group will rotate through the following roles (also developed by Mark Sample of Denison College):

First Readers: This is akin to the standard blog post assignment: a 250-500 word response to the week's materials. There are a number of ways to approach the "first reader" response: to

consider the week's material in relation to its historical or theoretical context; to write about an aspect of the week's material that you don't understand, or that you don't agree with; to 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. First readers are responsible for posting their response to the class blog 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 two posts*, in comments of around (or longer than) a short paragraph. Comments are due by midnight on the night BEFORE the class meets.

Searchers: Students in this group find and share at least one relevant online resource (broadly conceived), and are responsible for providing a short (i.e. 250 word) evaluation of the resource, highlighting what makes it relevant to the class. Due by midnight on the night BEFORE the class meets.

The fourth group has the week off.

At the completion of each cycle, you will receive a letter 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.

Projects
In addition to the assignments described above, you will be completing two formal projects. The form of the midterm assignment is straightforward: a written analysis of a dataset in terms of the concepts and issues discussed in the course thus far. The final project is more open-ended: you will be creating a data visualization that conveys a specific social or political message (or other rhetorical argument). As part of the project, you will also be required to submit a written analysis that explains the rationale behind your visualization, with reference to the concepts and issues discussed in the course. The visualization portion of the final project can be conducted in groups of up to three people, but the analysis must be submitted individually, regardless of group size.

Specific information about each project will be distributed no later than two weeks before the due date.

Attendance, Punctuality, and Late/Skipped Assignments
You are allowed three excused absences, no questions asked. However, you are responsible for finding out what was discussed in the course on any days that you miss; I do not provide copies of lecture notes.

Beginning with the fourth absence, your overall course grade will be lowered by a half letter grade (e.g. B to B-) for each unexcused absence.

Please be respectful to your fellow students and arrive on time. If you arrive more than 15 minutes late, you will be considered absent for that class. If you absolutely must miss a class meeting, please contact me at least 24 hours in advance in order to make alternate arrangements.

All assignments are mandatory. Should you submit an assignment after the due date, your grade for that assignment will decrease by a half letter grade for each day that it is late (e.g. B becomes B-). Should you fail to submit an assignment entirely, you will receive an F on that assignment and consequently, a lower grade for the course. Should you need an extension, please contact me *in advance* to discuss your situation.

ADAPTS Contact Information
Students with disabilities should self-report to ADAPTS at:
      Smithgall Student Services Building, Suite 220
      Phone: (404) 894-2564 / TTD: (404) 894-1664
      Email: adaptsinfo@gatech.edu
      http://adapts.gatech.edu/

Writing Support
The Georgia Tech communication center, CommLab, provides professional and peer tutors to work with you to improve your writing skills. More information, including instructions for how to set up an appointment via the website, is available here:
      Clough Learning Commons
      Phone: (404) 894-3805
      Email: commlab@gatech.edu
      http://www.lmc.gatech.edu/writingcomm/commcenter/

Honor Code Statement
Plagiarism is an extremely serious offense. Any evidence of plagiarism will result in an F on the assignment and possibly in the course, as well as potential disciplinary action. For more information, please refer to the definition of "academic misconduct" included in the Georgia Tech honor code, available online at:
      http://www.honor.gatech.edu/
If you are unsure as to what constitutes plagiarism, please contact me before submitting your assignment.

Class-by-Class Schedule
Class schedule subject to change.
Please consult the course website for the most current class schedule.

Week 1: What is truth? What is a fact?

January 9:
IN CLASS: Scott Shane, "From Headline to Photograph, a Fake News Masterpiece"

January 11:
IN CLASS: "The Fact of the Matter" (Radiolab podcast); danah boyd, "Did Media Literacy Backfire?"

Week 2: What is/are data?

January 16: Lisa Gitelman and Virginia Jackson, "Raw Data is an Oxymoron"; (PDF) Christine Borgman, "Provocations," from *Big Data, Little Data, No Data* (PDF)

January 18: Christine Borgman, "What are Data?" from *Big Data, Little Data, No Data* (PDF)*;* Yanni Loukissas, from *Local Data*, "Data Is vs. Data Are" (PDF)
DUE: Blog 1

Week 3: Why does data matter?

January 23: Charles Duhigg, "How Companies Learn Your Secrets; Rita Raley, "Dataveillance and Countervailance," from *Raw Data is an Oxymoron* (PDF)
DUE: Blog 2

January 25: Lizette Alvarez, "Meet Mikey, 8: U.S. Has Him on Watch List" ; Cathy O'Neil, "Civilian Casualties: Justice in a Digital Age," from *Weapons of Math Destruction* (PDF)
DUE: Blog 3

Weeks 4 and 5: Case Study I: The U.S. Census

January 30: Lisa Fundenberg, "Changing Faces" (and accompanying photo gallery); Peter Skerry, "Introduction" and "The Politics of Census Adjustment," from *Counting on the Census* (PDF)
DUE: Blog 4

February 1: Danny Vinik and Andrew Restuccia, "Leading Trump Census Pick Causes Alarm"
IN CLASS: Lab: Social Explorer

February 6: Margo Anderson, "Introduction" and "The Census and the New Nation," from *The American Census: A Social History* (PDF)
DUE: Blog 5

February 8: Heather Krause, "Data Biographies: How to Get to Know Your Data"
IN CLASS: Lab: Finding and looking at data (download OpenRefine before class)

Week 6: Midterm

February 13: [NO READING DUE]
IN CLASS: Share dataset

February 15: NO CLASS, PROFESSOR AT TREVOR DAY SCHOOL
DUE VIA CANVAS: Midterm (Dataset Analysis)

Week 7: Final project preview

February 20: Rebecca Onion, "Hand Drawn Early 20th Century Charts Showing the State of African American Economic Life" ; David Levering Lewis, "Preface" and "Postlude to the Future" (PDF)
DUE: Blog 6

February 22: Eugene Provenzo, from *W.E.B. Du Bois's Exhibit of American Negroes*; W.E.B. Du Bois, Paris Exposition images (explore the images online)

IN CLASS: Guest Lecture: Dr. Britt Rusert, University of Massachusetts-Amherst; and Dr. Silas Munro, Otis College

Weeks 8 and 9: Visualizing data

February 27: Nathan Yau, from *Data Points:* V*isualization That Means Something* (PDF)
DUE: Blog 7

March 1: "Which Chart or Graph is Right for You?"; *Data + Design: A Simple Introduction to Preparing and Visualizing Information*
IN CLASS: Lab: Tableau I

March 6: Edward Tufte, from *The Visual Display of Quantitative Information* (PDF)*;* William Playfair, from *The Commercial and Political Atlas* (PDF)
DUE: Blog 8

March 8: Catherine D'Ignazio and Lauren Klein, from *Data Feminism* (PDF)
DUE: Blog 9
IN CLASS: Lab, Tableau II

Weeks 10 and 11: Case Study II: W.E.B. Du Bois

March 13: Guest Lecture: Dr. Karcheik Sims-Alvarado, *Preserve Black Atlanta*; reading TBD

March 15: Derrick Alridge, "W.E.B. Du Bois in Georgia"; Aldon Morris, from *The Scholar Denied* (PDF)
DUE: Blog 10

[MARCH 20 AND 22 SPRING BREAK NO CLASS]

March 27: Guest Lecture: Dr. Bryan Wagner, University of California-Berkeley; reading TBD

March 29: Shawn Michelle Smith, from *Photography on the Color Line* (PDF)*;* Alexander Weheliye, "Diagrammatics as Physiognomy" (PDF)
DUE: Blog 11

Week 12: Project Conferences

April 3: Project conferences (no class meeting)
April 5: Project conferences (no class meeting)

Week 13: Race and data today

April 10: NO CLASS, PROFESSOR AT SKIDMORE COLLEGE

April 12: Ruha Benjamin, "Data for Black Lives" (watch video); Shaka McGlotten, "Black Data"
DUE: Blog 12

Week 14: Project presentations

April 17: [NO READING DUE]
IN CLASS: Final project presentations

April 19: [NO READING DUE]
IN CLASS: Final project presentations

Week 15: Wrap Up

April 24: Evaluations, etc.

FINAL PROJECT DUE DATE (in lieu of final exam):
Thursday, April 26th, 5:40pm
Final project and analysis due via canvas