Writing through Big Data

Course Instructor: Aaron Beveridge
Course Number: ENG1131-1788
Regular Class Time: MWF -- Period 5
Workshop Class Time: W -- Period E1-E3
Office Hours: W -- Period 6
Office: TUR 4309
Room: CSE E211A

Course Description:

Students in Writing through Big Data will write about and research social media trends. Trends are popular and sometimes viral topics that circulate among social networks such as Facebook, Twitter, Youtube, Vine, Instagram, etc. For this semester, we will consider trends occurring within Twitter, and we will visualize data on these trends in order to better understand the way writing moves and circulates. All of the work in this course will build toward the final project where students present the data they have collected and visualized. Weekly workshops will teach students how to collect writing data and how to visualize it to support an argument about their given trend. All of the readings either deal with data collection and visualization or with the design and preparation of presentations for student research.

Course Rationale:

Writing through Big Data is a variation of the Writing through Media series of courses offered by UF's English Department. As the English Department website explains, the goal of the 1131 course "is to introduce students to the transition underway between literacy and post-literacy (electracy) in contemporary culture." The students in writing through media courses are intended to be "makers (and not just consumers) of new media." Writing through Big Data stays true to 1131's core concepts. Students in WtBD will accomplish two primary goals: (1) study contemporary writing as it occurs within social media, and (2) work to understand data visualization as a form of rhetorical practice by producing and reflecting on data visualizations of writing. In this class we will visualize data resulting from research conducted on social media trends. Trends identify large patterns of writing occurring in social media, and this class will research and visualize current trends as chosen by students.

Writing within this course is understood broadly as any available mode of communication: text, image, audio, video, or any available technical or artistic means of making meaning. In the era of Big Data, writing is undoubtedly chaotic. The flow of information is so continuous and widespread that making sense of writing requires using the tools and techniques of data science. Google CEO Eric Schmidt has said that we

now create as much information every 48 hours as we did from the beginning of time until 2003—*and he said this 5 years ago*. In order for students to understand how to effectively read and write within contemporary, complex forms of mediation, they need to know how to quickly aggregate and reconstruct large amounts of information. In this class students will collect data on writing as it occurs within social networks (specifically, Twitter), and then create visualizations of that writing data to arrive at a more complex understanding of contemporary writing and rhetorical practice.

Required Texts:
- Nathan Yau's *Visualize This*
- Nathan Yau's *Data Points*
- Garr Reynolds' *Presentation Zen*

Required Software/Technology:
*All software listed below is free and open source
- Laptop (If you do not own a laptop, I will help you secure one for the semester)
- R
  - http://cran.r-project.org/
- R Studio
  - http://www.rstudio.com/
- Inkscape
  - https://inkscape.org/en/
- MassMine

Course Assignments:
Student Conduct and Honor Code
Students are expected to know and adhere to UF student conduct and honor code policies. Please visit the link below if you are not familiar with these policies:
- https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

Attendance
This class is built around workshop and classroom participation, and therefore attendance is mandatory. Students are allowed to miss 2 of the regular 50 minute classes, and 1 of the 3-hour Wednesday night classes without negatively affecting the final course grade. Upon receiving a 3rd regular absence or a 2nd Wednesday night absence the overall grade in the course will drop by 5 points, and it will continue to drop by an additional 5 points for each subsequent absence. For example, 5 additional absences beyond the 3 allowed absences (8 in total) will drop a student's total class grade by 25 points.

The workshop grade is based on completion of activities and research during Wednesday night workshops. If students are absent for a Wednesday night workshop, then activities must be completed and turned in by the Friday class meeting time in order to receive credit. During the workshops, the first 1.5 hours of class will be spent completing the work in the workbook. After workbook work is completed, students are expected to spend the rest of the time working toward their individual research for their final project.

Workshop criteria:

- Finish projects, textbook assignments, or class work within the time provided
- Work consistently
- Prepared for class--having read assignments ahead of time as directed
- Provides peer with thoughtful feedback or assistance depending on assignment

The mini presentation allows students to present an abstract of their final project to their peers for feedback. The mini presentation allows students to test their chosen presentation method, as well as practice presenting for the first time. The mini presentation will be part of their final presentation. Students will not present writing data at this time, but they will be expected to have a well-developed research idea to present to their peers.

Presentation criteria:

- No less than 5 minutes, no more than 6
- Presentation appears practiced
- Presenter does not read from slides, but has prepared notes to assist with presentation
- A well-developed research idea is presented

The mid semester written exam will be open-book and open-Internet. The point of the mid term exam is to provide the opportunity for course reflection and synthesis. The exam will be responding to course readings, lectures, and workshop materials. Students will be provided with a general subject ahead of time, but the writing prompt will not be provided until the written exam. Criteria for this assignment will be provided along with the writing prompt at the time of the exam.

Exam criteria:

- Minimum of 750 words
- Displays an understanding of course readings and lectures

- Adequately responds to the exam questions

<mark>Blog Writing and Responding--20 points</mark>

Students will produce 10 discussion posts of 200 words, and will additionally respond to one of their peer's blog posts for every posted assignment. When a peer responds to an initial blog post, an additional response is required from the writer of the blog post. The 200 word initial post counts as 50% of the credit given to blog posts, and substantive responses to peer posts count as 50% of the credit. There is no minimum word count for peer responses, but responses must be substantive. Simple affirmation like "good job" or "nice post" will not count as a response. A substantive blog response should encourage further conversation, raise a question with the post, try to clarify an idea, or productively add to the topic. The weekly discussion is a core component of this course and will be graded on a weekly basis. The responses and conversations that follow initial posts ought to remain respectful and courteous.

Blog post criteria:
- Blog posts are due by class time
- 200 words minimum
- Relevant to course trend research

Response criteria:
- Substantive
- Timely-- initial responses due by Wednesday morning class time
  - Secondary responses by Friday morning class time

If blog posts do not meet the basic criteria, students will receive an email directing them on how to improve the quality of their posts. If quality does not improve, no credit will be given for subsequent posts following the email.

**Writing tip: Do not draft your blog posts within the browser window provided by the blog software. Draft your post within your favorite word processor or text editor and then copy/paste your text into the browser. Google docs is also acceptable for drafting posts since it saves frequently and will keep you from losing work.*

<mark>Final presentation--30 points</mark>

The final presentation motivates the work for the entire semester. The textbook selections and course readings, the workshop, the blog posts--all are designed to move students toward the completion of research for the final presentation. The research presented will investigate a particular trend occurring within Twitter. A trend is defined as either (1) a top ten trending topic, word, or concept from any of the available trend locations as defined by Twitter, or (2) a #hashtag trend of social or political importance that a student finds worthy of further research.

An example research project may be a trend similar to the #ferguson trend that responds to the shooting of unarmed black teenager Michael Brown by a white police officer. By collecting a large sample of tweets associated with the #ferguson trend, students are able to parse their tweets according to other words or #hashtags that appear in the tweets. This data provides the basis for investigating other words or trends associated with #ferguson. Students then pull information on the associated trends to build a more complex representation of how the initial #ferguson trend is associated to other important trends. Students may also map #ferguson and its associated trends to see where and when these trends appear/iterate most frequently since trend data from Twitter includes location and time information. Finally, students compare this data to other "outside" data in order to make a final claim. For example, students could map national data on police shootings of black Americans and compare this to their own data. Students could collect outside data from a handful of various perspectives—allowing them the opportunity to make broader claims about the importance or relevance of their trend.

Final projects do not need to be limited to the types of analyses and visualizations described above, but they need to substantially explore the trend chosen by the student and investigate its relevance, exigence, and impact. The class will collaboratively determine the criteria for the final assignment following the "Final project introduction" lecture on the Friday of week 6. The components of the final assignment to be chosen by the class will be the following:

Components of final assignment:

- Presentation software (PowerPoint, Prezi, Google Presentation, etc.)
- Delivery method (How will this research be re-delivered after presentation? YouTube, Facebook, Twitter, class website. What is our broader audience?)
- Research (How do we determine a well-investigated research question?)
- Data (How many data visualizations should be required? What types of data should be presented? How much space in the presentation should be given to data description and analysis?)

Total Points for Semester: 100

Course Calendar:

Week 1

1.7   Course Introduction and Syllabus Overview
E   *Visualize This* chapter 1-2, Software Installation and Intro to Workshop
1.9   "What is writing studies?" lecture -- Prezi

Week 2

1.12   *Data Points* chapter 1 "Understanding Data"

1.14   *Revising Prose* chapters 1-3

E   Workshop--MassMine/Intro to Research Computing

1.16   Blog post due

Week 3

1.19   No Class

1.21   *Visualize This* chapter 3 "Choosing Tools to Visualize Data"

        Visualize This chapter 4 "Visualizing Patterns Over Time"

E   Workshop

1.23   *Data Points* chapter 2 "Visualization: The Medium", Blog post due

Week 4

1.26   *Data Points* chapter 3 "Representing Data"

1.28   *Visualize This* chapter 5 "Visualizing Proportions"

E   Workshop

1.30   Blog post due

Week 5

2.2   "What is visual rhetoric?" lecture -- Prezi, Blog post due

2.4   *Visualize This* chapter 6 "Visualizing Relationships"

E   Workshop

2.6   *Data Points* chapter 4 "Exploring Data Visually"

Week 6

2.9   "Final project introduction" lecture -- Prezi

2.11   *Visualize This* chapter 7 "Spotting Differences"

E   Workshop

2.13   Blog post due

Week 7

2.16   Mandatory individual conferences, Blog post due

2.18   Mandatory individual conferences

E   Workshop

2.20   Mandatory individual conferences

Week 8

2.23   *Data Points* chapter 5 "Visualizing with Clarity"

2.25   Review for mid course written exam

E   Mid course written exam

2.27   Workshop, Blog post due

Week 9
Spring Break

Week 10
3.9   *Data Points* chapter 6 "Designing for an Audience"
3.11   *Visualize This* chapter 8 "Visualizing Spatial Relationships"
          Visualize This chapter 9 "Designing with a Purpose"
E   Workshop
3.13   Blog post due

Week 11
3.16   *Data Points* chapter 7 "Where to Go from Here"
3.18   No class, Blog post due
E   No Class, read *Presentation Zen*
3.20   No Class, read *Presentation Zen*

Week 12
3.23   *Presentation Zen* discussion, Blog post due
3.25   Workshop
E   Mini presentations, peer response
3.27   Workshop

Week 13
3.30   Workshop
4.1   Workshop
E   Workshop
4.3   Workshop

Week 14
4.6   Individual conferences
4.8   Individual conferences
E   Workshop
4.10   Individual conferences
Week 15
4.13   Workshop
4.15   Workshop
E   Workshop
4.17   Workshop

Week 16
4.20   Final presentations

4.22   Final presentations

E   Final presentations and course wrap-up