# #4558

# Social Media Research and Analytics The Ohio State University Journalism 216

**Course Instructor** 

Prof. Joseph Bayer, Ph.D. bayer.66@osu.edu
Include 4558 in Subject

**Office Hours** 

Thursdays
Derby Hall 3143
Mondays 3:00-4:00pm (or by appt.)

# **Course Description**

This course represents an introduction to analyzing social media data with an emphasis on the implications for communication strategy, market research, and technology history. How do we know whether a feature on the new iPhone is working? What type of consumers are most likely to buy a given product? How does the perception of a company change after a crisis? Social media streams can provide valuable insights into users, brands, audiences, and industries. The course is composed of two primary parts: (I) an overview of the approaches and challenges associated with doing social media research, and (2) an involved project in which you will apply the knowledge gained to a self-determined case study on a social platform.

# **Objectives and Outcomes**

The primary objectives of this course are to teach students how to obtain, monitor, and evaluate digital traces from online social platforms. When we are finished, you will be prepared to approach future industry and academic problems with an understanding of how social media data can help accomplish your goals. You will learn the advantages/disadvantages of using social media data, how to operate an established analytics platform, and how to complete a novel research project using social listening. Altogether, you will acquire the fundamental knowledge and skills needed to work with social media data to approach new problems.

### **Course Materials**

A number of platforms for the purpose of learning and conducting social media analytics over the semester, with a special focus on the following five...

- I. Canvas and/or Carmen (for class materials)
- 2. TopHat (for Hybrid activities)
- 3. Crimson Hexagon (for social analytics)
- 4. Netlytic (for social analytics)
- 5. Google Spreadsheets (for data analysis)

Students are also recommended to acquire two books that serves to compliment the online and offline course activities. Combining business and academic perspectives, Lutz Finger (Snap) and Dr. Soumitra Dutta's (Cornell University) Ask, Measure, Learn will provide insights into the communication strategies for conducting robust analytics from an industry standpoint. The book will reinforce the weekly readings and highlight a range of business applications. In addition, students are recommended to acquire Storytelling with Data to augment the course's focus on visualizing and presenting data in a efficacious manner.

Finger, L. & Dutta, S. (2014). Ask, Measure, Learn: Using Social Media Analytics to Understand and Influence Customer Behavior. Sebastopol, CA: O'Reilly.

Knaflic, C. N. (2015). Storytelling with Data: A Visualization Guide for Business Professionals. Hoboken, NJ: Wiley.

## **Course Format**

The course is composed of one weekly offline (in-person) class and regular online activities. On most days, classes will be composed of hybrid activities as individuals or within groups. Class time will be split between teaching analytics skills and rehearsing learned skills through an involved case study, which represents a substantial portion of the course grade.

### **Grade Distribution**

This class has 200 possible points. Points are distributed as follows:

Class Attendance	20 points
Hybrid Activities	16 points
Online Quizzes	24 points
Platform Report	8 points
Netlytic Report	20 points
Crimson Report	12 points
Case Proposal	20 points

# Requirements (200 points)

# • Class Attendance (20 pts.)

 Attendance will be taken each lab. Students will be allowed **ONE** absence for personal matters (i.e., no excuse necessary) during the semester. For each unexcused absence after that, you will lose 2 points for each missed class.

# • Hybrid Activities (16 pts.)

 A participation grade will be assigned at the end of the course based on your completion of four hybrid (in-n-out-class) activities. All activities will begin in-class and submitted to the Activity HQ on Google Spreadsheets.

# • Online Quizzes (24 pts.)

o Four online quizzes will be posted on Carmen during the semester based on the course readings and lessons. Students can take them at their discretion.

# Platform Report (8 pts.)

 You will recommend implementation of a social media analytics platform to a selfselected company. See assignment instructions on Carmen.

# Netlytic Report (20 pts.)

 You will report the results of text and network analyses related to a self-selected a product on Netlytic. See assignment instructions on Carmen.

# Crimson Report (12 pts.)

 You will provide a summary report concerning the brand selected by the class this semester. See assignment instructions on Carmen.

# Case Proposal (20 pts.)

o In teams of 3 or 4 individuals, you will propose a case study on a "social platform" in front of the class. Make-up presentations will be arranged for excused or unavoidable circumstances only (e.g., deaths, personal/family illness, emergencies) with written verification. See assignment instructions on Carmen.

# Case Blueprint (20 pts.)

 Your case team will provide the research design for your case study, including how exactly you will employ data from Wayback Machine and Crimson Hexagon to learn about your chosen platform. See assignment instructions on Carmen.

# Case Poster (60 pts.)

Your case team will compete the analytics project detailed in your Case Blueprint. After conducting your analysis, you will make a poster to represent your project and its key findings. I will provide detailed instructions as the semester progresses. Toward the end of the semester, we will transition from focusing on hybrid activities to your case projects. As the largest share of your grade for the class, the poster will be scrutinized and used to evaluate the overall effectiveness of your research project. See assignment instructions on Carmen.

#### **Course Policies and Procedures**

Students are expected to act responsibly and abide by the following policies:

All cell phones must be silenced during class. Students must refrain from reading the newspaper, texting, listening to headphones, e-mailing, or using the Internet during class unless it is part of the lecture. Students may be asked to leave class for such behaviors. Any form of audio or video recording is <u>not</u> allowed in class. Students are also not permitted to take pictures of the projection screen. The instructor does <u>not</u> give permission for the lecture sessions to be recorded (in either an audio or video format).

Academic misconduct will not be tolerated on any occasion. It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct: <a href="http://studentlife.osu.edu/csc/">http://studentlife.osu.edu/csc/</a>. Final papers and research proposals will be submitted to turnitin.com. Work that has been submitted to other courses will count as plagiarism even if you were the originator of that work.

The School of Communication at The Ohio State University embraces and maintains an environment that respects diverse traditions, heritages, experiences, and people. Our commitment to diversity moves beyond mere tolerance to recognizing, understanding, and welcoming the contributions of diverse groups and the value group members possess as individuals. In our School, the faculty, students, and staff are dedicated to building a tradition of diversity with principles of equal opportunity, personal respect, and the intellectual interests of those who comprise diverse cultures.

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu/

# **Course Grading**

At the end of the course, dividing your total number of points by 200 will yield your final course grade percentage. Letter grades will be assigned using the grading scheme below.

93 - 100 (A)	80 - 82.9 (B-)	67 - 69.9 (D+)
90 - 92.9 (A-)	77 - 79.9 (C+)	60 - 66.9 (D)
87 - 89.9 (B+)	73 - 76.9 (C)	Below 60 (E)
83 - 86.9 (B)	70 - 72.9 (C-)	, ,

Graduating seniors (and other students) who "need" this course to graduate should work especially hard to ensure that they will pass this course. To be fair to all students in the class, there will not be opportunities for students to re-complete assignments in order to raise their grades. It is the student's responsibility to ensure that he or she receives a passing final grade by working diligently and responsibly throughout the semester. Exceptions will not be made.

This syllabus is an agreement between the instructor and the student. Events that transpire over the semester may require me to modify the syllabus. In the event that I need to modify the syllabus, I will announce the modification in class. However, it is your responsibility to keep up with any such modifications and be aware of current policies, deadlines, etc.

By staying enrolled in this class, the student agrees to abide by the policies described above.

# Mini-Schedule

Week	Date	In-Class Activities	Assignments
I	Jan 10	Co-Learning   Crowdsourcing	Hybrid Activity A
2	Jan 17	Collecting Data   Twitter API	Hybrid Activity B
3	Jan 24	Questioning   Hypothesizing	Platform Report
4	Jan 31	Text Analysis   Network Analysis	Hybrid Activity C
5	Feb 7	Case Workshop	Online Quiz #1
6	Feb 14	Trending Data   Comparing Data	Netlytic Report
7	Feb 21	Sentiment Analysis   Planning Wayback	Hybrid Activity D
8	Feb 28	Topic Analysis   Planning Crimson	Online Quiz #2
9	Mar 7	Case Proposals   Team Presentations	Case Slides
10	Mar 14	Spring Break	(Freedom)
11	Mar 21	Audience Analysis   Collecting Wayback	Online Quiz #3
12	Mar 28	Critiquing Data   Collecting Crimson	Case Blueprint
13	Apr 4	Historicizing Data   Linking Analyses	Crimson Report
14	Apr II	Guest Speaker   Career Strategy	Online Quiz #4
15	Apr 18	Visualizing Data   Case Storytelling	Case Poster
16		Finals Week	

# See Full Schedule Below for Details!

# WEEK I (Jan 10)

Learning through Co-Construction and Crowdsourcing

Due Online: Hybrid Activity A

**Key Reading #1:** Birnholtz, J., Hancock, J., & Retelny, D. (2013). Tweeting for class: co-construction as a means for engaging students in lectures. *Proceedings of CHI*, 797-800.

# **WEEK 2 (Jan 17)**

Collecting Social Media Data and (Mostly) Simple Programming

Due Online: Hybrid Activity B

**Key Reading #2:** Brooker, P., Barnett, J., & Cribbin, T. (2016). Doing social media analytics. *Big Data* & *Society*, 1-12.

• **See also...** F&D Ch. 9

## **WEEK 3 (Jan 24)**

Analytics Questions (Induction?) vs. Hypotheses (Deduction!)

Due Online: Platform Report

Key Reading #3: Lewis, K. (2016). Three fallacies of digital footprints. Big Data & Society, 1-4.

• See also... F&D Ch. 8

# **WEEK 4 (Jan 31)**

Basic Text and Network Analytics via Netlytic Freeware

Due Online: Hybrid Activity C

**Key Reading #4:** Lampinen, A. (2016). Why we need to examine multiple social network sites. *Communication and the Public*, 1-5.

• See also... F&D Ch. 8

## **WEEK 5 (Feb 7)**

Picking Social Media Winners... and Forgotten Losers

Due Online: Online Quiz #1

**Key Reading #5:** Felt, M. (2016). Social media and the social sciences: How researchers employ Big Data analytics. *Big Data & Society*, 1-15.

## **WEEK 6 (Feb 14)**

Evaluating Trends and Comparisons via Crimson Hexagon

Due Online: Netlytic Report

Key Reading #6: McFarland, D. A., & McFarland, H. R. (2015). Big Data and the danger of being

precisely inaccurate. Big Data & Society, 1-4.

# **WEEK 7 (Feb 21)**

Sentiment Analysis and Planning Your Wayback Analysis

Due Online: Hybrid Activity D

Key Reading #7: Diesner, J. (2015). Small decisions with big impact on data analytics. Big Data &

Society, 1-6.

# WEEK 8 (Feb 28)

Topic Analysis and Planning Your Crimson Analysis

Due Online: Online Quiz #2

**Key Reading #8:** Wilkinson, D. and Thelwall, M. (2010). Social network site changes over time: The case of MySpace. *Journal of the American Society for Information Science and Technology*, 2311-2323.

# **WEEK 9 (Mar 7)**

Time to Propose: Making a Case for Your Social Media Case Study

Due Online: Case Slides

**Key Reading #9:** Dimmick, J., Feaster, J. C., & Ramirez, A. (2016). The niches of interpersonal media: Relationships in time and space. *New Media & Society*, 1-18.

• See also... F&D Ch. 10

# **WEEK 10 (Mar 14)**

Spring Break! Analyze social media on your own time...

Due Online: Nothing...

**Key Reading #10:** Salisbury, M., & Pooley, J.D. (2017). The #nofilter self: The contest for authenticity among social networking sites, 2002-2016. *Social Sciences*, 1-24.

# WEEK II (Mar 21)

Audience Analysis and Collecting Wayback Data for Case Projects

Due Online: Online Quiz #3

**Key Reading #11:** boyd, D., & Crawford, K. (2012). Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon. *Information, Communication & Society*, 662-679.

# **WEEK 12 (Mar 28)**

Critiquing Data and Collecting Crimson Data for Case Projects

Due Online: Case Blueprint

**Key Reading #12:** Shaw, R. (2015). Big data and reality. Big Data & Society, 1-4.

## **WEEK 13 (Apr 4)**

Historicizing Data and Aggregating #Data for Your Case Projects

**Due Online: Crimson Report** 

**Key Reading #13:** Moe, W., & Schweidel, D. A. (2017). Opportunities for innovation in social media analytics. *Journal of Product Innovation and Management*, 697-702.

• See also... Stone, B. (2016). Twitter's cofounder on creating opportunities. HBR, 1-10.

# WEEK 14 (Apr 11)

Guest Speaker! Imagining the Real World...

Due Online: Online Quiz #4

**Key Reading #14:** Hogan, B., & Quan-Haase, A. (2010). Persistence and change in social media. Bulletin of Science, Technology & Society, 309-315.

## **WEEK 15 (Apr 18)**

Visualizing Data and Storytelling: Make that Data Sparkle!

Due Online: Case Posters...

**Key Reading #15:** Natale, S. (2016). Unveiling the Biographies of Media: On the Role of Narratives, Anecdotes, and Storytelling in the Construction of New Media's Histories. *Communication Theory*, 1-19.

## WEEK 16 (Finals Week)

End of Semester! Finish your case studies...

Due Online: Case Posters!