

DSM 550 Analytics and Research Methodology 4.0 Units

Spring 2022

TUESDAYS 6:30 – 9:20 p.m. | Section 21867

ANN 404

Location: Online first 2 weeks/Remainder of semester In-person

Professor: Jeffrey L Thompson | Adjunct Lecturer
USC Annenberg School for Communication

Office Hours: Tuesdays 5:15 – 6:15pm

Contact Info: jt07549@usc.edu
213-615-9205

Linkedin:

<https://www.linkedin.com/in/jthompsonusc143/>

Course Description

The world's most valuable resource is no longer oil, but *data*, says The Economist, a weekly international news and business publication. Social media platforms as well as digital sites and apps are a critical part of this ecosystem because they generate substantial amounts of quantitative and qualitative data.

Digital analytics is the practice of analyzing the data from these sources. Digital analytics can be applied to multiple scenarios. A few examples are:

1. Designing a social media campaign and assessing its success
2. Creating a digital site or app and evaluating its effectiveness, and/or
3. Making the business case for more resources for digital and social media.

For students in the Digital Social Media MS Program, this course on analytics and research methodology teaches the use and interpretation of digital analytics as well as the use of research design, methodology, and basic statistics for digital sites and apps.

Class sessions will focus on active learning activities that apply and put into practice the course readings and materials. The purpose is to prepare students to use analytics and research methodologies to make prudent decisions about digital social media strategies and tools used in corporations and organizations.

Student Learning Outcomes (SLOs)

Upon completion of this course, students will be able to:

1. Select appropriate statistical research methods to assess digital and social media effectiveness
2. Design a basic communication research study for a social media campaign, digital site, or an app
3. Use Google Analytics to process, organize, and analyze data for decision making
4. Evaluate digital and social media analytics and use them to make data-driven business decisions
5. Apply data visualization techniques to effectively communicate digital analytics

Policies and Procedures

Diversity, Inclusion, Equity, and Access

An inclusive, welcoming, and accessible environment as well as intellectual freedom are priorities in this class and in class discussions. Please be respectful. Any form of racism, sexism, xenophobia, homophobia or other forms of discriminatory behavior on the basis of ethnicity, gender, sexuality, or class will not be tolerated. Please speak up if you have concerns about anything said in the classroom, either during the class or by contacting the instructor privately.

Attendance

Students are strongly encouraged to attend class meetings in person or virtually as announced via Zoom. It is recognized that personal circumstances will sometimes arise that preclude class attendance. In such circumstances, the student is responsible for obtaining the materials presented in missed classes and making up missed assignments. If you will be missing a class session, please let me know in advance via email. However, there will be no penalty for failing to attend live sessions, and students who miss live sessions will be able to keep up with the class by reviewing class recordings and engaging through asynchronous class activities and assignments.

COVID-19

If you find yourself experiencing COVID-19 related symptoms, in keeping with university recommendations, you should:

- Stay home! This is the best way to prevent spreading COVID-19 as supported by scientific evidence. Please do not come to an in-person class if you are feeling ill, particularly if you are experiencing symptoms of COVID-19. Nothing we do in our class is worth risking your health, my health, or the health of your peers.
- You may participate in the live Zoom session or access to recording at a later date.
- Contact me to identify options available to keep up with course requirements and content.

Lecture Flexibility

Due to the nature of this course and the availability of guest speakers, there may be changes to the order of topics explored, addition or deletion of class lectures, and adjustments to speakers and speaker dates. Every effort will be made to give students ample notice of changes need to be made. The syllabus schedule should be viewed as preliminary.

Classroom Norms

We're living and learning in unusual times. With so many businesses operating through remote work, our classroom environment will help prepare you to succeed and lead in a virtual environment. In our first week, we will collectively create the norms for interaction that will guide us throughout the semester. As conditions change, we'll evolve along with them, similar to a corporate setting.

Zoom Etiquette

- Camera: Although you are not required to turn your camera on, it is highly recommended to turn it on for an optimal class experience for you, your classmates, and your instructor.
- Microphone: Please keep your microphone off during class, except when you participate in discussions, complete in-class work such as in a breakout room, or ask questions.

- Clothing and Background: While there is not a dress code, please consider the appropriateness of your clothing and your background.

Communication

Students are encouraged to contact the instructor outside of class, as needed to support your academic success, via office hours, email, and/or Slack.

Office Hours

Office hours are 5:15 – 6:15 p.m. Pacific Time on Tuesdays through Zoom or in person. Please email me to schedule time during office hours at jt07549@usc.edu. If you cannot meet during office hours, you can arrange to meet with me at another time by sending an email with your request.

Email

You are also encouraged to email me with questions on any topic you would like to discuss. In general, I will respond to emails within 24 hours or sooner.

Slack

This class will use Slack as a communication and collaboration tool. Further details are under “Descriptions of Assignments.” You may also contact me directly via Slack.

Blackboard

Course materials and weekly slides will be posted on Blackboard.

Technological Proficiency and Hardware/Software Required

Class meetings will be held via Zoom, so students should have the latest version of Zoom on their laptops. Examples of the websites and apps we will use in class include Blackboard, Sprout Social, and Google Analytics. Microsoft Excel software will be used to process and analyze data.

Required Readings and Supplementary Materials

Readings and other materials are noted in the weekly course schedule. Links are included for those available in the public domain. Other readings and materials for weekly course meetings will be posted on Blackboard.

Primary Textbook:

Salganik, Matthew J. 2018. *Bit by Bit: Social Research in the Digital Age*. Princeton, NJ: Princeton University Press.

Description and Assessment of Assignments

Six assignments will make up your total grade in this class. Brief descriptions of the assignments follow. For assignments noted with an *, an Assignment Brief that includes a grading rubric will be posted on Blackboard and reviewed in class.

Weekly Discussions (Online and In-Class) + Slack Collaboration (SLO 1, 2, 3, 4, 5)

During each week of the course, you will make at least 3 substantive and thoughtful contributions and/or comments as part of in-class work and/or class discussions (synchronous), Blackboard discussion prompts (asynchronous), and/or Slack topic prompts (asynchronous).

Facebook Insights analysis

Collect and analyze social data leveraging Facebook Insights.

Google Analytics (SLO 1, 4)

You will take the *Google Analytics for Beginners* and *Advanced Google Analytics* courses online at <https://analytics.google.com/analytics/academy/>. You will then complete the [Google Analytics Individual Qualification](#) (GAIQ).

Social Data Analysis with Twitter or Instagram

For this assignment, we will collect and interpret the meaning of a small set of social data from Twitter or Instagram.

Survey Design Assignment (SLO 2)*

You will design and execute a brief survey on a topic of your choosing, analyze the data, and report on the results in 5-7 page paper, using the statistics and survey methodologies covered in class sessions, readings, and course materials.

Final Analytics Project: Dashboard and Reporting Plan (SLO 1, 4, 5)*

You will bring together the course learnings in a digital analytics dashboard and reporting plan of 5-7 pages/slides. You will choose an organization, real or made up, and identify goals for the dashboard and reporting, analytics to be included, reporting cadence and audience, and a data visualization overview.

Grading Breakdown of Grade

Assignment	Points	% of Grade
Weekly Discussions (In-Class and Online) + Slack Collaboration	150	15%
Facebook Insights/Instagram Analysis	150	15%
Collect & Analyze Social Data from Twitter or Instagram	200	20%
Google Analytics	100	10%
Survey Design Assignment	200	20%
Analytics Project: Dashboard and Reporting Plan	200	20%
TOTAL	1,000	100%

Grading Scale

This course has 1,000 possible points. Each assignment has a point score and percentage score. Your percentage scores on the assignments will be totaled and translated to a letter grade per this scale:

94 to 100%: A	80% to 83%: B-	67% to 69%: D+
90% to 93%: A-	77% to 79%: C+	64% to 66%: D
87% to 89%: B+	74% to 76%: C	60% to 63%: D-

84% to 86%: B	70% to 73%: C-	0% to 59%: F
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Grading Standards

Grades will be assigned as follows for the type and quality of work that is submitted by the student in order to earn each letter grade:

Letter Grade	Description
A/A-	Excellent, outstanding, thoughtful, and enthusiastic work that “goes the extra mile” to create professional-level assignments that could be presented to a CEO, C-Suite leader, or client. Demonstrates extraordinarily high achievement and critical thinking; comprehensive knowledge and understanding of subject matter; all expectations met and exceeded
B+/B	Good, graduate-school caliber and above-average work, demonstrating moderately broad knowledge and understanding of subject matter; explicitly or implicitly demonstrates good, if not thorough understanding; stronger critical thinking and expression would be needed for success in a professional setting; most expectations met
B-/C+	Fair, with only a basic level of knowledge and understanding of the subject matter; improvement needed on critical thinking, creativity, ideas, arguments, and follow through; some expectations met
C and below	Fulfilling the bare minimum, reflecting little critical thinking, marked by many errors, and/or showing little understanding of the material

Grading Timeline

For effective learning, students should receive timely feedback on assignments and exams. Therefore, every attempt will be made to grade assignments/exams and post grades within two weeks. Scores for all assignments and exams are regularly updated on Blackboard.

You are responsible for notifying the instructor **within one (1) week** of a score posting if you think a score is missing or inaccurate. Moreover, you only have this period of time to contest a score on an assignment/exam. If you fail to inquire/notify us of any discrepancy, missing score, or contest a score within one week of the date the score is posted, no further changes will be made.

Assignment Submission Policy

All work must be submitted on time. Assignments are due on the dates specified in the Course Schedule section of this syllabus, at 11 p.m. Pacific Time.

Assignments must be submitted via Blackboard. If there is an issue with Blackboard, you may email your assignment to me, along with a screenshot of the Blackboard issue.

Extensions may be available if you seek them generally at least a week before the due date, and provide the reason for your request. Late work may not be accepted, or accepted with substantial penalty.

Add/Drop Dates for Session 001

15 weeks: January 10, 2022 – April 29 2022; Final Exam Period: May 4 - 11

Friday, January 28: Last day to register and add classes for Session 001

Friday, February 28: Last day to drop a class without a mark of “W,” except for Monday-only classes, and receive a refund for Session 001

Friday, February 25: Last day to drop a course without a mark of “W” on the transcript for Session 001. Mark of “W” will still appear on student record and STARS report and tuition charges still apply. Please drop any course by the end of week three (or the 20 percent mark of the session) to avoid tuition charges.

Friday, April 8: Last day to drop a class with a mark of “W” for Session 001

Course Schedule: A Weekly Breakdown

Important note to students: Be advised that this syllabus is subject to change – and probably *will* change – based on the progress of the class, events, and/or guest speaker availability, where relevant.

Week Date	Topics Daily Activities	Readings Preparations	Deliverable Due Dates
Week 1 1/11	Introduction Classroom Norms Statistics: Gathering Statistics	Croucher, S., & Cronn-Mills, D. Understanding Communication Research Methods. pp. 3-13 Klein, G., & Dabney, A. - The Cartoon Introduction to Statistics. pp. 1-88 Bit by Bit – Salganik Chapter 1 https://www.bitbybitbook.com/en/1st-ed/introduction	
Week 2 1/18	Statistics: Hunting Parameters Ethics & Human Subjects Research	Klein, G., & Dabney, A. The Cartoon Introduction to Statistics. pp. 89-204 Bit by Bit – Salganik Chapter 6 https://t.co/DVZKQFXdPx	Discussion Post 1
Week 3 1/25	Statistics: Thinking Like a Statistician + The Math Cave Ethnography Interpreting & Understanding Data	Klein, G., & Dabney, A. The Cartoon Introduction to Statistics. pp. 205-225 Croucher, S., & Cronn-Mills, D. Understanding Communication Research Methods. pp. 133-146 Bit by Bit – Salganik Chapter 2 https://t.co/2BCfWYJ58u VIDEO. Kozinets, R. What is netnography?	

Week Date	Topics Daily Activities	Readings Preparations	Deliverable Due Dates
Week 4 2/1	Interviewing Focus Groups	Croucher, S., & Cronn-Mills, D. Understanding Communication Research Methods. pp. 155-167 and 173-184	
Week 5 2/8	Social Media and Research Methods Sprout Social Analytics	Croucher, S., & Cronn-Mills, D. Understanding Communication Research Methods. pp. 147-159 Salganik Chapter 4 https://t.co/iXi56YM3dA VIDEO. Goncalves, A. Mastering Social Media Analytics . Overview. Data Collection. Analytics. Dashboards. Reports. Actions. <i>Watch in this order:</i> 01:42 – 02:10 and 0:00 – 42:23	President's Day: Mon., Feb. 14 Discussion Post 2
Week 6 2/15	Social Media Analytics and Metrics Google Analytics	Tuten & Solomon. Social Media Marketing, Chapters 10 & 11: Social Media Analytics and Social Media Metrics. pp. 316-337 and 341-368 VIDEO: Goncalves, A. Mastering Social Media Analytics . Strategy. Tactics. Future of Social Analytics. 42:24 – 01:42	Discussion Post 3
Week 7 2/22	Guest Speaker - TBD Survey Research / Interview Research	Croucher, S., & Cronn-Mills, D. Understanding Communication Research Methods. pp. 222-237 Salganik, Chapter 3 https://t.co/R9KTeRN87S	
Week 8 3/1	Content Analysis: Qualitative + Quantitative Target Audiences	Croucher, S., & Cronn-Mills, D. Understanding Communication Research Methods. pp. 183-221	Collect & Analyze Social Data from Facebook Insights, Instagram
Week 9 3/8	Descriptive Statistics <i>Guest Speaker: TBA</i>	Croucher, S., & Cronn-Mills, D. Understanding Communication Research Methods. pp. 238-253	

Week Date	Topics Daily Activities	Readings Preparations	Deliverable Due Dates
Week 10 3/15		Spring Break – No class meeting	Spring Break – No Class
Week 11 3/22	Network Analysis	Valente, T. Communication Network Analysis. Croucher, S., & Cronn-Mills, D. Understanding Communication Research Methods. pp. 261-286	GOOGLE ANALYTICS INDIVIDUAL QUALIFICATION
Week 12 3/29	<i>Guest Speaker: TBD</i>		
Week 13 4/5	Storytelling with Data: Understand the Context + Choose An Effective Visual	Knaflic, C., & Madden, C. Storytelling With Data. Chapters 1 & 2	SURVEY ASSIGNMENT DUE
Week 14 4/12	Storytelling with Data: Identify and Eliminate Clutter + Focus Attention Future Research	Knaflic, C., & Madden, C. Storytelling With Data. Chapters 3 & 4 Salganik Chapter 7 https://www.bitbybitbook.com/en/1sted/the-future/	Discussion Post 4
Week 15 4/19	Storytelling with Data: Think Like a Designer + Tell a Story	Knaflic, C., & Madden, C. Storytelling With Data. Chapters 5 & 6	USC Course Evaluations in class
Week 16 4/26	Final Presentations		Discussion Post 5
FINAL PROJECT 5/5	Study days – May 1 – 4		FINAL PROJECT DUE THURSDAY, MAY 5 at 11 p.m. Pacific Time

Statement on Academic Conduct and Support Systems

a. Academic Conduct

Plagiarism

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.

The School of Communication maintains a commitment to the highest standards of ethical conduct and academic excellence. Any student found responsible for plagiarism, fabrication, cheating on examinations, or purchasing papers or other assignments will be reported to the Office of Student Judicial Affairs and Community Standards and may be dismissed from the School of Communication. There are no exceptions to the school’s policy.

In addition, it is assumed that the work you submit for this course is work you have produced entirely by yourself, and has not been previously produced by you for submission in another course, without approval of the instructor.

b. Support Systems

Counseling and Mental Health - (213) 740-9355 – 24/7 on call

studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call

suicidpreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention and Services (RSVP) - (213) 740-9355(WELL), press “0” after hours – 24/7 on call

studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED)- (213) 740-5086 | Title IX – (213) 821-8298

equity.usc.edu, titleix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following *protected characteristics*: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations. The university also prohibits sexual assault,

non-consensual sexual contact, sexual misconduct, intimate partner violence, stalking, malicious dissuasion, retaliation, and violation of interim measures.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs - (213) 740-0776

dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Campus Support and Intervention - (213) 821-4710

campussupport.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, **HSC:** (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, **HSC:** (323) 442-120 – 24/7 on call

dps.usc.edu

Non-emergency assistance or information.

Annenberg Student Success Fund

<https://annenberg.usc.edu/current-students/resources/additional-funding-resources>

The Annenberg Student Success Fund is a donor-funded financial aid account available to USC Annenberg undergraduate and graduate students for non-tuition expenses related to extra- and co-curricular programs and opportunities.