

## **DSM 550: Analytics and Research Methodology Course Syllabus**

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**Office Hours:** By appointment, in person  
or virtual

**Term:** Summer 2017, May 17 - August 8  
**Schedule:** Tuesday, 5pm-9pm  
**Room:** ANN 210

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### **DESCRIPTION**

This course provides an overview of many methodological and analytical concepts, tools, and skills that you can use to manage and evaluate digital assets and strategies, including on social media, websites, and other online communities. Most organizations employ social scientific research to effectively understand if and how their social media and other online strategies are working. Whether you are working for yourself, a small business, a non-profit, a multinational corporation, or any other entity, it is important to know how to ask the right questions and get meaningful answers. In this course, you will learn to both critically evaluate research that has already been conducted and develop a plan to conduct research on your own.

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### **GOALS**

- Determine the important questions to ask for different kinds of problems
  - Explore methodologies that can be used to gather the information to answer those questions
  - Learn how to effectively design a research plan to answer the questions that are most important to your organization or community
  - Use, interpret, and effectively communicate about common web and social media metrics
  - Understand and perform basic statistical procedures to make confident evaluations and recommendations about social media strategy
  - Critically evaluate the research conducted by others
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### **ATTENDANCE & PARTICIPATION**

Attendance and participation are required in this course. It is very important that you attend all class sessions for several reasons. First, many of the assignments and activities will be started and/or completed during class time. We also will have guest speakers which will give you important insight into problems you may face on the job. Most importantly, we will have many brainstorming sessions and critical discussions, providing an opportunity to also learn from each other. This experience cannot be replicated outside of the classroom. If for any reason you cannot attend, please give me as much advance notice as possible so that we can make sure you are getting all of the essential information you need.

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### **ASSIGNMENTS OVERVIEW**

- 1) **Readings:** You are required to complete the assigned readings prior to the class in which they're assigned.
- 2) **In-Class Assignments:** There will be several assignments that will be started during class time, all of which must be fully completed before the next class (deadline: 4pm on following Tuesday).

- 3) **In-Class Activities:** There will be many in-class activities and assignments for which you cannot get credit without being in class.
- 4) **Research Presentation & Brief:** You will be assigned to present to the class an interesting piece of research (from a list) on social-media related issues during one class day. You must create a 2-page brief document (see template on Blackboard) to accompany your presentation that you will turn in on your assigned day. This document will be shared with all class members as a resource.
- 5) **Final Group Project:** You will work with a group of your colleagues for several weeks on a project that ties together the concepts and skills you've learned in the course into a plan for a research project to better understand the people who will engage with your proposed digital space. This project will involve both a group presentation and white paper.

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### GRADE BREAKDOWN

- Attendance & Participation: 10%
- In-Class Activities: 10%
- In-Class Assignments: 20%
- Research Critique Paper & Presentation: 20%
- Final Group Project: 40%

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### GRADING SCALE

Percentages will be calculated by taking the total points earned in the course and dividing by total possible points (1000).

	B+: 87.6 – 89.5	C+: 77.6 – 79.5	D+: 67.6 – 69.5		
A: 92.6 – 100	B: 82.6 – 87.5	C: 72.6 – 77.5	D: 62.6 – 67.5	F: Under 59.5	
A-: 89.6 – 92.5	B-: 79.6 – 82.5	C-: 69.6 – 72.5	D-: 59.6 – 62.5		

### POLICIES

**Late assignments** will be accepted within one week of the deadline, accruing 10% late penalty each day up to 50%. After one week, the assignment will not be accepted.

Please **email me to set up meetings** to discuss the class material, assignments, or anything else about which you're concerned. We can either meet in person (on campus) or virtually through voice or video call.

Please **do not use mobile phones** during class for non-class related purposes. You are **encouraged to use a computer or tablet** to take notes, look up confusing terms, or do other relevant searches to the class discussion or activity. If technology becomes distracting, or if it is not appropriate for some activities, I will request that you put it away either temporarily or permanently.

Please contact me if you have **any issues making it to class or making it to class on time**. If anything is barring you from full participation in this course, it is better to **let me know as soon as possible**. We can work on making arrangements so that you get the most out of this course.

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## **ACADEMIC INTEGRITY**

As with all courses at USC, your work in this class must be yours. Any attempt to represent others' work as your own will receive a failing grade on the assignment in question (at a minimum) and will be reported to the Office of Student Conduct. **See the last page of this syllabus for the official statement on academic conduct.**

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## **ACADEMIC ACCOMMODATIONS**

This class will accommodate any student requesting assistance. **See the last page of this syllabus for the official statement on support systems.**

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## **REQUIRED TEXTS**

Dataclism: Who We Are (When We Think No One's Looking) by Christian Rudder  
<https://www.amazon.com/Dataclism-When-Think-Ones-Looking/dp/B00M284HDO>

How to Measure Social Media: A Step-By-Step Guide to Developing and Assessing Social Media ROI by Nichole Kelly  
[https://www.amazon.com/Measure-Social-Media-Step-Step/dp/0789749858/ref=pd\\_sim\\_14\\_23?encoding=UTF8&psc=1&refRID=5MTGM0ZPG3NBCFPWP7GJ](https://www.amazon.com/Measure-Social-Media-Step-Step/dp/0789749858/ref=pd_sim_14_23?encoding=UTF8&psc=1&refRID=5MTGM0ZPG3NBCFPWP7GJ)

Other required readings (articles, chapters, etc...) will be uploaded or linked on Blackboard for the week they are assigned.

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## **COURSE SCHEDULE**

This weekly breakdown of the class schedule is tentative & subject to change depending on the progress of the class and the schedule of guest speakers.

### **Week 1: May 23**

Topic: Intro to the Course | Intro to Each Other | Why Research Matters

Agenda:

- I. Introduction to the Course / Syllabus
- II. Introductions
- III. Why this class is important for you

### **Week 2: May 30**

Topic: Reading & Understanding Research

Agenda:

- I. Research 101
- II. Breaking Down a Research Paper: The Essentials

### **Week 3: June 6**

Topic: The Research Process & Asking Good Questions

Agenda:

- I. Order of Operations for Conducting Research
- II. Ethical Considerations
- III. Asking Good Questions
- IV. Research Presentation by Student(s)

- V. Assignment: Work with your teammates to think of 5 interesting research questions that would be useful to know for your research project (Due 4pm June 13)

#### **Week 4: June 13**

Topic: Intro to Quantitative & Qualitative Methods

Agenda:

- I. Ways of viewing the world
- II. What is a "method"
- III. The scientific method
- IV. Things to consider:
  - A. "Triangulation"
  - B. How to Measure
  - C. Time
- V. Research Presentation by Student(s)
- VI. Assignment: Turn one of your research questions into at least one hypothesis. Conceptualize and think of ways to operationalize the hypotheses concepts, using research to back up why (Due 4pm June 20)

#### **Week 5: June 20**

Topic: Quant Methods in depth

Agenda:

- I. Experiments
- II. Surveys
- III. "Big Data" / Behavioral data / Traditional analytics
- IV. Content Analysis
- V. Research Presentation by Student(s)
- VI. Activity: Understanding means, standard deviations, p-values, effects
- VII. Assignment: Analyze data that I provide to you (Due 4pm June 27)

#### **Week 6: June 27**

Topic: Qual Methods in depth

Agenda:

- I. Focus Groups
- II. Interviews
- III. Ethnography
- IV. Research Presentation by Student(s)
- V. In-Class Activity: Design an interview or focus group protocol
- VI. Assignment: Develop a 1-page proposal on a research project that you would like to do for your final project, utilizing at least one (likely more) of the methods

**Week 7: July 4** (Independence Day, NO CLASS)

#### **Week 8: July 11**

Topic: Research Design

Agenda:

- I. How to design a research plan
- II. Issues to consider for ALL research methods (quant, qual, mixed):
  - A. Sample vs. Population

- B. Ethics [ + not making your customers angry ]
- III. Research Presentation by Student(s)
- IV. Activity: Research proposal day (present & critique)

**Week 9: July 18**

Topic: Metrics & Analytics

Agenda:

- I. How to choose metrics, read metrics
- II. How to measure Return on Investment (ROI)
- III. Measurement tools
- IV. Possible Guest Speaker
- V. Research Presentation by Student(s)

**Week 10: July 25**

Topic: Visualizing & Communicating about Research, Data, Metrics, etc...

Agenda:

- I. Types of visualizations
- II. How to spot visualization flaws/lies
- III. Possible Guest Speaker
- IV. Activity: Spot the lies in

**Week 11: August 1**

Topic: Review of everything we've learned

Agenda:

- I. Review concepts
- II. Answer any questions
- III. Work on final project with time to ask questions / get feedback

**Week 12: August 8**

Topic: Final Project Presentations

## **Statement on Academic Conduct and Support Systems**

### **Academic Conduct**

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” <https://policy.usc.edu/student/scampus/part-b>. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Discrimination, sexual assault, intimate partner violence, stalking, and harassment are prohibited by the university. You are encouraged to report all incidents to the Office of Equity and Diversity/Title IX Office <http://equity.usc.edu> and/or to the Department of Public Safety <http://dps.usc.edu>. This is important for the health and safety of the whole USC community. Faculty and staff must report any information regarding an incident to the Title IX Coordinator who will provide outreach and information to the affected party. The sexual assault resource center webpage <http://sarc.usc.edu> fully describes reporting options. Relationship and Sexual Violence Services <https://engemannshc.usc.edu/rsvp> provides 24/7 confidential support.

### **Support Systems**

A number of USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the American Language Institute <http://ali.usc.edu>, which sponsors courses and workshops specifically for international graduate students. The Office of Disability Services and Programs <http://dsp.usc.edu> provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, USC Emergency Information <http://emergency.usc.edu> will provide safety and other updates, including ways in which instruction will be continued by means of Blackboard, teleconferencing, and other technology.