

**MEJO 713 Digital Data & Analytics**  
**Spring 2023**

**Instructor:** Dr. Xinyan (Eva) Zhao

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**Zoom Office hours:** by appointment (4-7 pm, Mon-Wed)

**COURSE OVERVIEW**

This course explores the fundamental concepts and principles that underlie techniques for extracting useful information and knowledge from digital data. The primary goal of the course is to help you view problems from a data perspective and understand how to systematically analyze such problems. More importantly, the goal of this class is for you to learn different kinds of digital data and how you can use data strategically. This data-analytic thinking can then be applied in a variety of ways, from data-driven storytelling to the creation of actionable insights.

**OBJECTIVES**

Understand the types of questions that data can and cannot answer, and how data are used in strategic communication:

- Describe basic concepts of digital data and analytics
- Analyze digital data for strategic communication
- Communicate the results of digital data analytics
- Integrate data in digital marketing decision making

**REQUIRED MATERIALS**

- Digital Marketing Analytics: Making sense of consumer data in a digital world (2nd edition) by Chuck Hemann & Ken Burbary
  - This textbook is in many places to buy a hard copy, as well as an e-book (if that's how you prefer to read)
- In addition to the textbook, current industry and topical readings will be required some weeks. All of these readings will be linked in the syllabus and shared in the weekly announcements. To keep the class current and adaptive, these readings will populate throughout the semester but will always be available at least 1-2 weeks in advance.
- In the beginning of the course, you will be required to take several Google Analytics courses. These are available free online, but you will need a Google account to register.
- LinkedIn Learning courses are not required for the course, but they are freely available to you as UNC students. I've linked to some in the syllabus if there are topics you are interested in learning more about.

**SAKAI, EMAIL, AND FOURMS**



**Sakai:** All course info will be posted on Sakai. To keep things current, folders will be populated with content throughout the semester, but I will always post readings and forum posts at least 1 week in advance, if not more. You are responsible for any course changes that may be made on Sakai, including changes to the syllabus or assignments. I will notify you if/when such changes occur.

**Email:** Please make sure you are checking your UNC email. You are responsible for any course communications I send your way.

**Forums:** As is standard with most online courses, the forums will serve as a critical part of this course. So, keep constant contact here. Forum posts are sometimes posted 1 – 2 weeks in advance, but you should not respond to a forum until granted access and/or the forum is due. This will ensure you are learning and reviewing the material before responding to the forum prompts. Most of the exercises will also be completed via the Forums, and instructions will be given on each exercise.

### **SPECIAL ACCOMMODATIONS**

If you require special accommodations to attend or participate in this course, please let the instructor know as soon as possible. If you need information about disabilities visit the Accessibility Resources & Services site at <https://ars.unc.edu/>.

### **SEEKING HELP**

If you need individual assistance, it is your responsibility to meet with the instructor. If you are serious about wanting to improve your performance in the course, the time to seek help is as soon as you are aware of the problem – whether the problem is difficulty with course material, a learning difference, or an illness.

### **DIVERSITY**

The University's policy on Prohibiting Harassment and Discrimination is outlined on the Equal Opportunity and Compliance Office's webpage (<https://eoc.unc.edu/our-policies/ppdhrm/>). UNC is committed to providing an inclusive and welcoming environment for all members of our community and does not discriminate in offering access to its educational programs and activities on the basis of age, gender, race, color, national origin, religion, creed, disability, veteran's status, sexual orientation, gender identity, or gender expression.

### **ACCREDITATION**

The Hussman School of Journalism and Media's accrediting body outlines a number of values you should be aware of and competencies you should be able to demonstrate by the time you graduate from our program. Learn more about them here: <http://hussman.unc.edu/accreditation>. No single course could possibly give you all of these values and competencies; but collectively, our classes are designed to build your abilities in each of these areas. The values and competencies associated with this course include being able to:

- apply basic numerical and statistical concepts
- apply tools and technologies appropriate for the communications professions in which they work
- demonstrate an understanding of the diversity of peoples and cultures and of the significance and impact of mass communications in a global society
- think critically, creatively, and independently



- write correctly and clearly in forms and styles appropriate for the communications professions, audiences, and purposes they serve

### **HONOR CODE**

The Honor Code (<https://catalog.unc.edu/policies-procedures/honor-code/>) forms a bond of trust among students, faculty, and administrators. The University of North Carolina at Chapel Hill operates under a system of self-governance, as students are responsible for governing themselves. As such, our University is transformed into a powerful community of inquiry and learning. The Honor Code embodies the ideals of academic honesty, integrity, and responsible citizenship, and governs the performance of all academic work a student conducts at the University. Acceptance of an offer of admission to Carolina presupposes a commitment to the principles embodied in our century-old tradition of honor and integrity.

### **GRADING & ASSIGNMENTS**

#### Grading scale

Consistent with graduate Hussman Courses, grades will be distributed in the format of either a High Pass (H), Pass, Low Pass (L) or Fail (F). I will assign you a grade on your Forum posts, Simulator activity, Exercises, and on Final. Your forum posts and simulator activity will be assigned an overall grade once you have completed all posts and simulations, but if you have any questions about your progress on these, please don't hesitate to ask. I will give you a letter grade on each of your Exercises, as well as an overall Exercise grade at the end of the semester. The grading system generally breaks down as follows:

**H:** Professional equivalent: The work is stellar. If this was an internship, I would go out of my way to hire you, based on your work on the assignment.

**P:** Professional equivalent: You met all the requirements of the assignment. If this was an internship, you demonstrated that you were a competent employee. You showed proper work ethic, that you were thinking critically about the material, and that you understand the concepts of the class.

**L:** Professional equivalent: Though not a failing effort, you showed a lack of understanding the material, a lack of effort, and/or a lack of critical thinking.

**F:** Professional equivalent: Your work was not professional and did not show a competent level of understanding, effort or critical thinking.

#### Grading rubric

A note on grading rubrics: While the forum posts are pretty straightforward, each exercise, as well as your final, will have an Assignment Grading Rubric. These will be posted under the "Assignment Rubrics" folder under the Resources Tab when each assignment is given out.

Late assignments will lose 10% for every day that they are late.

Your overall grade for the course will be based on the following criteria:

**Forums: 20%**

### Assignments

Consistent with many of your online courses in this program, much of your work will be based on keeping up with weekly readings, reviewing any additional materials, such as brief async videos, and related participation. A forum prompt will be posted each week, and your response will be due the following week. These prompts will populate throughout the semester. Each week's info will be posted in weekly assignment folders found under the Resources Tab. Forum discussion prompts will occur in the Forums Tab.

More than anything, I am looking for critical thought out of your posts. Each post will require several paragraphs of written thought and feedback. Many forum prompts will have a subset of questions. Additional information will be found within each forum prompt.

### Readings

It is expected that you keep up with class readings. Each week, you can find the readings on the syllabus (readings outside the textbook chapters will be linked). I will also send out a weekly announcement reiterating the readings. I will stay at least 1 – 2 weeks ahead of you in posting these readings, as the goal of the course is to give you plenty of time to complete assignments but also to allow us to adapt as the semester progresses.

### **Google Analytics for Beginner & Google Ads Search Certifications (20%)**

The Google Analytics and Ads courses are a fantastic primer for this class. You will earn a certificate at the end of the two courses we will complete as part of the class. You will upload the certification to Sakai. You either complete this or don't – this is a completion grade.

### **Exercises: 20%**

Exercises are essentially slightly meatier forum posts – some of them require you to create new documents. In the second half of the class, most of the exercises will build towards your final project. Exercise Rubrics will be posted under the Assignment Rubrics folder (under the Resources Tab) when each Exercise is given.

### **Final: 40%**

The final in this course will pull together all that you have learned from class readings, discussions, and exercises. It will require you to do a data and analytics review of an organization's digital activity. This will include your gathering of their public data, as well as potentially capturing other 3rd Party data about that organization. You will write this up into a strategy & research memo. The memo will allow you to offer your assessment of the organization's digital presence, strategy and audience. The assignment will also allow you to demonstrate that you have competently learned the class material. The organization you review can be one that you currently work for, one that you would like to work for, or another real-world client that may interest you. We will discuss the final in late February. At that time, the full grading rubric for the final will be released under the Assignment Rubrics folder (under the Resources tab).

### **NOTES ON CLASS STRUCTURE**

I hope that you will find that I'm willing to put in as much time into this course as you are, meaning: please don't hesitate to reach out if you have questions! I always try to respond to emails within one business day. I'm also always open to one-on-one Zoom sessions or phone chats – just email me and we can coordinate a time. Furthermore, I plan on having an "open video office hour" one evening every 2 weeks. I will confirm a consistent time after the first week

of class, based on your feedback of what is best for the class. The format will basically be an unstructured hour where we have an optional sync session – anyone that is available can log-in, and we will have the hour to discuss any further questions you may have as an individual, or as a group, about that week's material.

### COMMUNICATION:

This is a class rooted in the practice of communication – so let's communicate! Use social media or Google or Sakai to communicate with one another or share ideas. Email is also important – and can be facilitated via Sakai. Collaborative work or helping one another can be fostered with Google Docs. I'll do my best to respond to emails within 24 hours (except for weekends).

### WHO AM I?

I'm Dr. Xinyan (Eva) Zhao. I joined the faculty at UNC's Hussman School of Journalism and Media in 2020. Before coming to UNC, I was an assistant professor in public relations at Hong Kong Baptist University. I have a PhD in communication from University of Maryland at College Park. I have taught classes and conducted research on social media and strategic communication for a decade. You can find out more about my research at <https://evazhaoxy.wixsite.com/zhao>

### WEEKLY CLASS SCHEDULE

*\*of course, all potentially subject to change due to, well, the state of things*

#### **Week 1 | January 9 – What are analytics? What are digital analytics? What do we mean by data?**

1. Read  
– Chapter 1: Understanding the Synergetic Digital Ecosystem & [Paid, Owned, and Earned Media in 2022](#)
2. Write – Forum response post: due Wednesday, January 11, 11:59pm
3. Do – Complete the [course survey](#) before Sunday, Jan 15, 11:59 pm

#### **Week 2 | January 16 – Digital Analytics in Practice**

(note: Monday, January 16 is a holiday)

1. Read – Chapter 2: Understanding Digital Analytics Concepts & [Content Marketing Analytics: 9 Ways to Use Data to Transform Your Strategy](#)
2. Write – Forum response post: due Wednesday, January 18 11:59pm
3. Do – [Google Analytics for Beginners](#) and upload the certification (~3 hours): due Sunday, January 22 11:59pm

#### **Week 3 | January 23 – Data platforms & Acquisition channels**

1. Read – Chapter 3: Choosing Your Analytics Tools & Chapter 6: Digital Analysis: Ecosystem
2. Write – Forum response post: due Wednesday, January 25 11:59pm

**Week 4 | January 30 – Search Engine Optimization (SEO)**

1. Read – [HubSpot: Intro to SEO](#) (pp. 5-34) & Understanding Searcher Intention (see Sakai)
2. Write – Forum response post: due Wednesday, Feb 1 11:59pm
3. Do – [Google Ads Search Certification](#) and upload the certification (~ 3 hours): due Sunday, February 5 11:59pm

**Week 5 | February 6 – Brand Analysis**

1. Read – Chapter 4: Digital Analysis: Brand
2. Write – Forum response post: due Wednesday, February 8 11:59pm
3. Do – Get a free trial of [Brand Mention](#) or sign up for a free account of [Social Searcher](#) – if you don't have access to expensive tools such as Brandwatch, you might find the tools handy when you work on the forum post.

**Week 6 | February 13 – Audience Analysis**

(note: Monday, February 13 is Wellness Day. Please take whatever sort of break that day that is helpful for you. The deadline of the forum post is postponed to Friday.)

1. Read – Chapter 5: Digital Analysis: Audience & [Intro to SparkToro Audience Intelligence](#)
2. Write – Forum response post: due Friday, February 17 11:59pm
3. Do – [Sign up for a free account of SparkToro](#) and complete the Audience Analysis Exercise: due Sunday Feb 19 11:59pm

**Week 7 | February 20 – Customer Expectations**

1. Read – [Customer journey map: The key to understanding your customer](#) & Chapter 10: Improving Customer Service
2. Write – Forum response post: due Friday, February 22 11:59pm
3. Do – Customer Journey Map Exercise: due Sunday, February 26 11:59pm

**Week 8 | February 27 – Research Planning**

1. Read – Chapter 13: Building Your Research Plan & (optional) [How to Use Google Analytics: A Complete Guide](#)
2. Write – Forum response post: due Wednesday, March 1 11:59pm
3. Do – Review final project rubric & FAQs

**Week 9 | March 6 – Social Media & Digital Analytics**

1. Read  
– Chapter 9: How to Use Digital Analytics to Inform Marketing Programs & Understanding Social Landscape (see Sakai) & [Social Listening Guide: 8 Ways Companies Can Use Social Data](#)
2. NO forum post this week

## Week 10 | March 13 – SPRING BREAK

### Week 11 | March 20 –Twitter, Instagram, & Facebook Analytics

1. Read - [How to Use Twitter Analytics: 15 Simple-to-Find Stats to Help You Tweet Better & Instagram Analytics Explained \(Plus 5 Tools for 2023\)](#) & [The Straightforward Guide to Twitter Analytics](#) & (optional) [The Beginner's Guide to Facebook Analytics](#)

2. Write – Forum response post: due Wednesday, March 22 11:59pm

3. Do – Rough Draft Section Exercise: due Sunday, March 26 11:59pm

a. Please complete at least a rough draft of one section of your final. This could be (look at the final rubric for the detailed description of these sections):

- i. a. Communication layout
- ii. b. Audiences (Part I or Part II)
- iii. c. Organizational Goals and Conversion metrics
- iv. d. Funnels and barriers

### Week 12 | March 27 – YouTube, TikTok, and Snapchat Analytics

1. Read - [YouTube Analytics: The 15 Metrics That Actually Matter](#) & [The Complete Guide to TikTok Analytics: How to Measure Your Success](#) & (optional) [Snapchat Insights: How to Use the Analytics Tool \(And What to Track\)](#)

2. Write – Forum response post: due Wednesday, March 29 11:59pm

3. Do – Data Variables Exercise: due Sunday, April 2 11:59pm.

**Option 1:** If you have not done so, finish collecting the data you will need for analyses. If you collect data manually, you could share your Excel file or at least the variables you are collecting. This will allow me – and others – to see if you need to collect or examine any additional variables that might be relevant to obtaining richer insights.

**Option 2:** If you already have all your data, go ahead and do what (for many of you) would be your first analyses of the data points. What did you find? What are 1-2 insights you found from this analysis? What do you need help and advice on to make meaning of what you're looking at?

### Week 13 | April 3 – Return on Investment

1. Read – Chapter 7: Return on Investment

2. Write – Forum response post: due Wednesday, April 5 11:59pm

3. Extra – LinkedIn Learning: [Social Media Marketing ROI](#) & [Marketing and Monetizing on YouTube](#)

### Week 14 | April 10 – Writing Reports & Visualizing Data

1. Read – Chapter 14: Building Reports that Will Actually be Useful & [Juice Labs Chart Chooser](#) & [Which Type of Chart or Graph is Right for You?](#)
2. Write – Forum response post: due Wednesday, April 12 11:59pm
3. Do – Move forward with your project. With less than a month to go, think about the following questions:

Based on where you are at in your project, what questions do you have? Are there metrics questions you still have? Are there customer journey or audience research questions? If you've run your data analysis, feel free to post your results. Do you have questions about what you're seeing? Or, maybe you have your data, but you're unsure of what is important to examine?

### **Week 15 | April 17 – Future of Digital Data & AI**

1. Read – Chapter 15: The Future of Digital Data & [What Is OpenAI's ChatGPT, And How Can You Use It?](#) & [How can AI image generation with DALL·E 2 be used in digital marketing?](#)
2. Write – Forum response post: due Wednesday, April 19 11:59pm
3. Do – Schedule a ~15-minute Zoom meeting with me to discuss the progress of your final project.

### **Week 16 | April 24 – 🎵 It's the final countdown 🎵** (note: Friday, April 28 is the last day of classes)

1. Do – Final project: due by Thursday, May 5 11:59pm