Digital Data and Analytics: MEJO 713

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Class Description and Goals

This course is designed to equip you with the tools necessary for you to use data in analyses and make data-driven decisions. The primary goal of the course is to help you view problems from a data perspective and understand how to approach and analyze these problems. In 2020, data can be extracted from a multitude of sources to shape a core business idea or gather information on an audience or product – by the end of the course you will be able to achieve this with confidence. More importantly, the goal of this class is for you to learn what data actually means and how you can use data strategically.

The course is designed to:

- Understand the types of questions that data can and cannot answer and how data are used in a variety of communication fields;
- Understand the ethical implications of accessing and using data;
- Understand the basics of data analysis;
- Learn how to best communicate and present the results of your analysis.

Text and Readings

- StuKent Marketing Analytics Textbook
 - o This textbook is digital / online
 - o Access instructions will be provided separately
- StuKent Simulation: We will also be using the StuKent Mimic Pro Simulation. Like the digital textbook, registration will be required.
- More details for StuKent access will be provided separately
- PowerPoint presentations and current industry and topical readings will be required most weeks all of these readings will be posted under the Sakai Resources tab. 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.
- Google Analytics provides comprehensive testing for different areas of web analytics. This will not be required, however I will encourage each of you to take and pass one throughout the semester in an area that serves your future career goals. If nothing else, you can tack it on your resume.

Sakai, Email, Forums

Sakai: All course info will be posted on Sakai. Most of the content will generally be found under the Resources tab -- most things you will need will be posted under each week's folder under the Resources tab. To keep things current, folders will be populated with content throughout the semester, but I will always post readings and forum posts at least 1-2 weeks 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.

Email: Check your school email. You are responsible for any course communications I send through email.

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 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 participate in this course, please let the instructor know as soon as possible. If you need information about disabilities visit the Accessibility Services website at https://accessibility.unc.edu/

Seeking Help

If you need individual assistance, it's your responsibility to contact 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, an illness, etc.

Honor Code

I expect that each student will conduct himself or herself within the guidelines of the University honor system (http://honor.unc.edu). All academic work should be done with the high levels of honesty and integrity that this University demands. You are expected to produce your own work in this class.

Diversity

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. Please see more about our MJ Diversity and Inclusion plan here: http://hussman.unc.edu/diversity-and-inclusion.

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://www2.ku.edu/~acejmc/PROGRAM/PRINCIPLES.SHTML#vals&comps

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. In this class, we will address a number of the values and competencies, with special emphasis on:

- 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;
- demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity;
- think critically, creatively and independently;
- write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve;

Grading and Assignments

Grading

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.

A note on grading rubrics: While the forum posts and simulations 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.

Assignments

Forums (20%)

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 powerpoint slides or additional materials, such as brief async videos, and related participation. A forum prompt will be posted at the beginning of each week, and your response will be due **by the following Sunday at**11:59pm (that allows almost a full week for each week's response). 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. The forum is not necessarily a regurgitation of information, rather should reflect an additional insight or substantial takeaway that applies to you in your career in relation to the prompt. Each post will require at least 2-3 paragraphs of written thought and feedback.

Readings

It is expected that you keep up with class readings. Each week, you can find the readings within the weekly folders under the Resources Tab. These readings will include a combination of: The StuKent digital textbook, current industry articles and reports, and data files. 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. Many times, there are great new industry readings, so this format allows us to stay current throughout the semester. Readings can also include occasional PowerPoints I post, as well as any async materials I include, such as short instructional videos.

Simulator (20%)

One of the best ways to learn is to learn by doing. In short, the big goal of the simulator is to give you a real-world feel of what it's like to work with some of this data. Therefore, you will go through six rounds of digital data simulation via the StuKent simulator. Each simulation takes about an hour. You will make strategic decisions that relate to writing digital content, thinking about digital products, and how to communicate about those projects online when considering a budget. More than anything, I'm interested in what you learn from these simulations. Thus, at the conclusion of each simulation, I want you to think about all the data you just created and write informed feedback and analysis in response to your work. **Please upload this to Sakai by Sunday at 11:59pm the week the assignment is given.**

Exercises (20%)

Exercises are essentially slightly meatier forum posts. While most of the simulations occur during the first half of the course, the exercises mostly occur in the second half of the semester. These exercises will require you to use data that I give you. Then, you will analyze that data to make informed, strategic decisions. 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, PowerPoints, simulations 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 third-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 about mid-February. At that time, the full grading rubric for the final will be released under the Assignment Rubrics folder (under the Resources tab).

Important Notes on Class Structure

Everyone in the class (including the teacher!) is a working professional. We all have lives, jobs, family, and other things that give us an opportunity to learn in new ways outside the traditional classroom structure. I want you to know I am available to you for any question or idea – no matter how small or large. You are always welcome to call me on my cell phone or email me any time.

Generally, I think of the week as operating Monday – Sunday. I will lead off each week with a weekly announcement of sorts for key things to focus on during your assignments. Most assignments will be due toward the end of the week, as to give you as much time as possible complete them. The majority of my communication with the class will be in evenings after work – it is a safe assumption that I will be available to you on Monday – Thursday evenings, then also occasionally on the weekends. Once we get started with the semester, I will also schedule weekly 'access hours' where we can discuss in detail any content from the class you want (something like a group Zoom conference).

Class Schedule (as of 1/1/2020, subject to change)

Week 0: Week of Jan 8th

What is your current understanding of analytics? What are some ways you have used analytics in your current or previous job roles? What do you want to be able to do better by the end of this course?

1) Submit a response to the forum in Sakai on what your understanding of analytics is, how you've seen it used, and what you want to do better by the end of the semester.

Week 1: Jan. 13th - Jan. 17th

What are analytics? What do we mean by data? What are KPI's?

Due:

- 1) Start digital reading on Sakai (Resources Tab, Week 1)
- 2) Get situated with the class Sakai site;
- 3) Forum response for Week 1;
- 4) Watch the 17-18 minute intro video on the StuKent class site that details for you the overview of the digital simulator we will use in the class;
- 5) Chapter 1: An Overview of Marketing Analytics

Week 2: Jan. 20th – Jan. 24th

Where do the data come from? What really is Big Data?

Due: 1) Weekly Forum post

- 2) Chapter 3: Data Technologies
- 3) Digital reading on Sakai
- 4) Start Simulation I on StuKent Simulator

Week 3: Jan. 27th – Jan. 31st

Data platforms and Acquisition channels

Due: 1) Weekly Forum post

- 2) Chapter 5: Marketing Data Platforms
- 3) Digital reading on Sakai
- 4) Exercise 1 (Due Jan. 31st at 11:59pm)

Week 4: Feb. 3 – Feb. 7

Meaning from data; Engagement vs. Conversion

Due: 1) Weekly Forum post

- 2) Chapter 6: Extracting Meaning from Data and the Web
- 3) Digital Reading on Sakai
- 4) Start Simulation II on StuKent Simulator

Week 5: Feb. 10th - Feb. 14th

Marketing Analytics Metrics + Retention

Due: 1) Weekly Forum post

- 2) Chapter 12: Marketing Analytics Metrics
- 3) Digital Reading on Sakai
- 4) Start Simulation III on StuKent Simulator

Week 6: Feb. 17th - Feb. 21st

A/B Testing and Experimentation

Due: 1) Weekly Forum Post

- 2) Chapters 8 & 9: A/B Testing + Experimental Design
- 3) Digital Reading on Sakai
- 4) Start Simulation IV on StuKent Simulator

Week 7: Feb. 24 – Feb. 28

Audience Segmentation

Due: 1) Weekly Forum Post

- 2) Digital Reading on Sakai
- 3) Start Simulation V on StuKent Simulator
- 4) Start Exercise II
- 5) Chapter 7: Segmentation and Targeting

Week 8: Mar. 2 – Mar. 6

AI and Analytics

Due: 1) Weekly Forum Post

- 2) Digital Reading on Sakai
- 3) Start Simulation VI on StuKent Simulator
- 4) Chapter 10: Artificial Intelligence and Analytics

Week 9: SPRING BREAK (3/9 – 3/13)

Week 10: Mar. 16 - Mar. 20

Data visualization for Analytics; News and Analytics

Due: 1) Weekly Forum Post

- 2) Digital Reading on Sakai
- 3) Start Exercise III
- 4) Chapter 11: Data Visualization

Week 11: Mar. 23 – Mar. 27

Statistics and Analytics

Due: 1) Weekly Forum Post

- 2) Digital Reading on Sakai
- 3) Start Exercise IV
- 4) Chapters 13, 14, and 15: Analyzing A/B, Marketing Mix and Moderation

Week 12: Mar. 30 – Apr. 3

Video Analytics; YouTube

Due: 1) Weekly Forum Post

- 2) Digital Reading on Sakai
- 3) Start Exercise V

Week 13: Apr. 6 – Apr. 10

Facebook, Twitter and Instagram Analytics

Due: 1) Weekly Forum Post

- 2) Digital Reading on Sakai
- 3) Start Exercise VI

Week 14: Apr. 13 – Apr. 17

Website Analytics

Due: 1) Weekly Forum Post

2) Digital Reading on Sakai

3) Start Exercise VII

Week 15: Apr. 20 – Apr. 24

Ethics in digital data and big data

Due: 1) Weekly Forum Post

2) Digital Reading on Sakai

Week 16: Apr. 27 – May 1

Topic: Final Review - One-on-Ones with Jason

Readings or Simulations: None

Due: Schedule 20-30 minute phone or zoom chats with Jason to discuss your final project

- see Sakai info to schedule times.

Final Project Due: May 4th at 11:59pm

Due: Submit via Sakai