MDSE 5330 Consumer Analytics and Data Visualization

Tues, Thurs 2-3:20 pm, via Zoom.

Join URL: https://unt.zoom.us/j/86807747306

Name: Dr. Jiyoung Kim Pronouns: she, her, hers

Office Location: Chilton Hall 342C

Office Hours: Tues 1-2pm, Wed 3-5pm, Thurs 1-2pm. Contact me to schedule a meeting! Scheduling

your appointment ahead of time always helps to reduce the line out my door.

Email: Please send your class-related email through Canvas message. If you have personal concerns or other matters you would like to communicate with me, send an email to jiyoung.kim@unt.edu.

Course Description

Examination of various consumer research methodologies including descriptive and predictive analysis. Application of analytical techniques in developing effective business strategies using analytics tools and data visualization programs.

Course Structure

Synchronous Zoom sessions occur during the scheduled class time and students are required to attend each class session. In each class, an in-class activity will be given. The lectures will be recorded and provided on Canvas for students to review later if needed.

Course Objectives

After taking this class, you will be able to

- 1. Utilize proper analysis techniques to draw inferences from data
- 2. Develop an effective graphical representation of data
- 3. Evaluate alternative visualization strategies
- 4. Identify and apply key customer metrics needed to solve the target problem
- 5. Construct a written report and presentation that explain and justify a recommended business strategy.

This class and its assignment meet the following global learning outcome of the college; Critical Thinking, Collaboration, Effective Communications

Materials

- The course uses a combination of teaching methods such as lecture, discussion, interactive activity, and group projects. Detailed information will be discussed in class and posted on Canvas.
- Recordings of each class will be available after class each day. The Mini Projects will be due in 6 days
 in order to allow students to review the recordings if they were unable to follow the lecture during
 the scheduled class time.
- Tableau: The license is available on the CMHT check-out laptops and/or through the following link.
- 1. Download the Tableau Desktop and Tableau Prep Builder using the <u>activation link in Tableau</u> (https://www.tableau.com/tft/activation)

2. Click on the link above and select "Download Tableau Desktop" and "Download Tableau Prep Builder". On the form, enter your school email address for Business E-mail and enter the name of your school for Organization.

- 3. Activate with your product key: TCOO-C2AA-A120-3049-E3ED
- 4. Already have a copy of Tableau Desktop installed? Update your license in the application: Help menu and Manage Product Keys
- 5. Students can continue using Tableau after the class is over by individually requesting their own one-year license through the <u>Tableau Community for Students</u>. (https://community.tableau.com/community/students/)

I also offer Power Bi is an option for students who have a recognized disability with the ODA, and assignments might be adjusted as the instructor see fit.

Course Technology & Skills

Minimum Technology Requirements

- Computer
- Reliable internet access
- Camera: It is required for students to have their camera on during the lecture. Set your screen name to your name on the roster.
- Speakers
- Microphone
- Microsoft Office Suite (Excel and Word)
- Tableau software installed
- <u>Canvas Technical Requirements</u> (https://clear.unt.edu/supportedtechnologies/canvas/requirements)

Computer Skills & Digital Literacy

Provide a list of course-specific technical skills learners must have to succeed in the course:

- Using Canvas
- Using email with attachments
- Downloading and installing software
- Using spreadsheet programs
- Using presentation and graphics programs

Course Requirements

Assignment	Points Possible
Mini project (8x30pts)	240
In-class activities (24X10pts)	240
Learning Report	10
Final project	400
Presentation Evaluation (2X10pts)	20
Exam (3x100pts)	300
Total Points Possible	1220

Grading

A = 90% and up

B = 80% or greater, and less than 90%

C = 70% or greater, and less than 80%

D = 60% or greater, and less than 70%

F = Less than 60%

Grades are based on mastery of the content. As a rule, I do not grade on a "curve" because that is a comparison of your outcomes to others. I do, however, encourage you to find opportunities to learn with and through others. Explore Navigate's Study Buddy (https://navigate.unt.edu) tool to join study groups. Maximize your learning with our coaching staff at the Learning Center. Focus on areas where you are struggling in this course by attending scheduled study group sessions with me the week before each exam. Forward together!

Every student in my class can improve by doing their own work and trying their hardest with access to appropriate resources. Students who use other people's work without citations will be violating UNT's Academic Integrity Policy. Please read and follow this important set of <u>guidelines for your academic success</u> (https://policy.unt.edu/policy/06-003). If you have questions about this, or any UNT policy, please email me or come discuss this with me during my office hours.

Course Policies

Communication

- Connect with me through email and/or by attending office hours. During busy times, my inbox becomes rather full, so if you contact me and do not receive a response within two business days, please send a follow up email. A gentle nudge is always appreciated.
- Send your class-related email through Canvas message. If you have personal concerns or other
 matters you would like to communicate with me, send an email to jiyoung.kim@unt.edu. When
 sending e-mails, be sure to put "RETL 4330" and a brief reason why you are emailing in the Subject line.
- Check Online Communication Tips (https://clear.unt.edu/online-communication-tips), a very brief guideline for you to follow when you are emailing me.

Attendance Policy

Every class meeting is essential to your success. To encourage your attendance, punctuality, and learning, I will provide in-class activities of the previous week's material during the class. Plan to arrive on time because you must be present when class begins the activity.

While attendance is expected, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill, or unable to attend class due to a related issue regarding COVID-19. It is important that you communicate with me prior to being absent so I may make a decision about accommodating your request to be excused from class.

If you are experiencing any <u>symptoms of COVID</u> (https://www.cdc.gov/coronavirus/2019-ncov/symptoms testing/symptoms.html) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or <u>askSHWC@unt.edu</u>) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Team at <u>COVID@unt.edu</u> for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure.

Late Work

All assignments' due dates/times are specified in the assignment guideline. <u>Late assignments will not be accepted</u> unless it meets all three conditions; 1) the student notifies the instructor <u>within 24 hours of the scheduled exam time/ or assignment due date</u>; 2) the circumstances are extenuating; 3) the student presents proof of the circumstances.

Examination Policy

- Exams are open notes and students can search the internet as they complete the exam. However, students should not discuss the exams/questions with their peers. If there is any question related to the exam, ask the professor.
- Students should independently work on the exam. Evidence of student's engagement in any conversations such as GroupMe during an exam will result in a 0 grade for that exam and possible failure of the course depending on the magnitude of the academic misconduct.
- Cheating, plagiarism, and facilitating academic dishonesty on the exam will result in either a 0 grade for the exam or failure in the course depending upon the magnitude of the academic misconduct.
- All students should be on Zoom with their camera and microphone on during the Exam. This helps to reduce the temptation to discuss the exam/questions with your peers. While you are taking the exam, Zoom will record the session. The recording is stored in a secured location that is only accessible to the faculty member and only reviewed if the professors have a reason to believe that there has been suspicious behavior. This is not intended to invade your privacy, but to reduce the temptation to get help from your peers during the exam when it is not permitted.
- If you lose Internet connection during an exam, call the Student Helpdesk UNT Student Help Desk: <u>helpdesk@unt.edu</u> or 940.565.2324 and document the remedy ticket number before contacting me via email, Canvas or phone immediately.

Assignment Policy

All due dates will be specified on the assignment guideline, syllabus schedule, and on Canvas. If you are unable to complete your assignment due to technical difficulty or other extenuating circumstances, contact the instructor immediately. For technical difficulties, call the UNT Student Help Desk: <a href="https://newsals.

- I will provide in-class activities of the previous week's material during the class. Plan to arrive on time because you must be present when class begins the activity. You need to submit the work before the class time ends.
- Mini project guidelines will be posted on Canvas. They will open on Tuesdays during the class period and will be due on Sunday 11:59pm.
- Students should submit original work using the assigned concepts.
- Cheating, plagiarism, and facilitating academic dishonesty on the project will result in either a 0 grade for the exam or failure in the course depending upon the magnitude of the academic misconduct.

Instructor Feedback

Grades will be posted within a week from the date the assignment is due. Since this is a hands-on learning class with software application, I have learned that grading individual work and providing feedback for this class can take longer than some of my other classes that uses multiple choice, simple quizzes or short essays. You are welcome to contact me with any concerns or questions regarding your assignment.

ADA accommodation

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website (http://www.unt.edu/oda). You may also contact ODA by phone at (940) 565-4323.

Supporting Your Success and Creating an Inclusive Learning Environment

I value the many perspectives students bring to our campus. Please work with me to create a classroom culture of open communication, mutual respect, and inclusion. All discussions should be respectful and civil. Although disagreements and debates are encouraged, personal attacks are unacceptable. Together, we can ensure a safe and welcoming classroom for all. If you ever feel like this is not the case, please stop by my office and let me know. We are all learning together.

Wk	Date		Module	In-class activities (10pts)	Mini projects due on Sundays (30 pts)	Project due
1	8/30	1	Data Analysis and Visualization	1		Academic Dishonesty Module due
	9/1	2	Data + Question	2		9/4 (S)
2	9/6	3	Visualization Element	3		Learning Report due 9/11 (S)
	9/8	4	Data Fundamentals	4	1	
3	9/13	5	Tableau UI overview	5		
	9/15	6	Data prep	6	2	
4	9/20	7	Variables and Data type I	7		Big Project sign up due 9/25 (S)
	9/22	8	Variables and Data type II	8	3	
5	9/27	9	Chart Type I	9		
	9/29	10	Chart Type II	10	4	
6	10/4		Exam 1			

	10/6	11	Good Model	11			
7	10/11	12	Combining Datasets	12			
	10/13	13	Aggregation and Granularity	13	5		
8	10/18	14	Dashboard	14			
	10/20	15	Story Page	15	6		
9	10/25	16	Story Telling Process 1	16		Big Project Part 1 due 10/30 (S)	
	10/27	17	Story Telling Process 2	17	7		
10	11/1	18	Story Telling Process 3	18			
	11/3	19	Statistical Concepts	19	8		
11	11/8	20	Inferential Statistics	20			
	11/10	21	Testing Hypotheses	21	9		
12	11/15		Exam 2				
12	11/17	22	Maps	22			
13	11/22		Project Assignment				
	11/24		Thanksgiving- No class				
14	11/29	23	Calculated Fields	23		Big Project Part 2 due 12/4 (S)	
	12/1	24	Analytical Tools	24			
15	12/6		Big Project Team Presentation				
	12/8		Big Project Team Presentation				
16	12/15 Thursday Final Exam 1:30-3:30pm via Zoom						

The final exam follows the official UNT schedule and cannot be moved, according to the UNT policy. <u>The final exam for this class is scheduled for mo/day (date) time-time</u>. The instructor has very little flexibility regarding this policy. If you cannot take your final exam for a legitimate reason (for example, more than 2 other final exams on the same day), please contact me.

Technical Assistance

CMHT-IT Services Student Laptop Checkout Information

The CMHT-IT Services desk located on the 3rd floor of Chilton Hall outside room **386** will have Dell laptops with the Tableau program available for checkout for all UNT students. These laptops and the CMHT-IT Services desk will be available during the following hours:

 Monday:
 8:00AM – 9:00PM

 Tuesday:
 8:00AM – 9:00PM

 Wednesday:
 8:00AM – 9:00PM

 Thursday:
 8:00AM – 9:00PM

 Friday:
 8:00AM – 5:00PM

These Dell laptops can be checked out at any point during the above hours and must be returned on the <u>same business day</u> to the CMHT-IT Services personnel. These laptops must remain on campus and will <u>not</u> save your data. So be sure to use a USB or email yourself to save your work! For more information, please stop by the CMHT-IT Services desk in Chilton Hall 386 or visit us on Zoom helpdesk at <u>unt.zoom.us/j/268838628</u> or give us a call at (940) 565-4227.

CMHT Virtual Lab

UNT Students currently enrolled in a CMHT course have access to the CMHT Virtual Lab provided by VMware Horizon View virtual desktop system. This is useful if your course requires specific software and you need access to the software on your personal machine. You can find more information and installation steps here: https://cmht.unt.edu/vmware-virtual-lab.

The CMHT-IT Services desk can assist you in installing the VMware client on your personal machine. Please see the above hours of operation for our IT services desk.

UNT Helpdesk

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: <u>UIT Student Help Desk site</u> (http://www.unt.edu/helpdesk/index.htm)

Email: helpdesk@unt.edu Phone: 940-565-2324

In Person: Sage Hall, Room 130 Walk-In Availability: 8am-9pm

Telephone Availability:

• Sunday: noon-midnight

Monday-Thursday: 8am-midnight

Friday: 8am-8pmSaturday: 9am-5pmLaptop Checkout: 8am-7pm

For additional support, visit <u>Canvas Technical Help</u> (<u>https://community.canvaslms.com/docs/DOC-10554-4212710328</u>)

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that
 utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex,
 sexual orientation, gender identity, gender expression, age, disability, genetic information,
 veteran status, or any other characteristic protected under applicable federal or state law will
 not be tolerated.
- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.
- Ask for and use the correct name and pronouns for your instructor and classmates.
- Speak from personal experiences. Use "I" statements to share thoughts and feelings. Try not to speak on behalf of groups or other individual's experiences.
- Use your critical thinking skills to challenge other people's ideas, instead of attacking individuals.
- Avoid using all caps while communicating digitally. This may be interpreted as "YELLING!"
- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.
- Avoid using "text-talk" unless explicitly permitted by your instructor.
- Proofread and fact-check your sources.
- Keep in mind that online posts can be permanent, so think first before you type.

See these <u>Engagement Guidelines</u> (https://clear.unt.edu/online-communication-tips) for more information.

Teaching Philosophy

This is a course that builds on students' creativity and exploration. Tableau has an endless number of functions that cannot be covered entirely in a single class. As we move along, students are required to master the skills learned in class but also encouraged to go beyond what we cover in lectures and explore other functions they'd wish to use in their project. Especially for the visualization (design) part of the class, students in previous semesters have surprised me with unique and creative visuals that are both effective and aesthetically pleasing. Sharing students' designs in class has inspired other students as well as myself. For this reason, I try to provide personalized feedback to each of you. Of course, there is a rubric to follow for the required elements. However, the feedback from me will be to suggest areas you can work on to improve your project from the current form. Therefore, I strongly encourage you to bring your best efforts into the class so I can help you reach the next level.