The University of Texas at Austin
School of Information

DATA STORYTELLING

INF 385T FALL 2025
UNIQUE #29980

THURSDAYS
6:30 PM to 9:30 PM
GDC 6.202

INSTRUCTOR: Dr. Amy Esselman
EMAIL: amy.esselman@austin.utexas.edu
MOBILE: 651-261-3516
OFFICE HOURS: 30 minutes before and after lectures, or on Zoom by appointment (email me)

WHAT YOU'LL LEARN

Data storytelling is an essential skill in today's digital world and is applicable across diverse fields and industries. It involves extracting meaningful insights from data and clearly communicating them through compelling narratives and visualizations for a specific audience. Effective data storytelling empowers individuals to make faster, smarter decisions that can save lives, secure competitive advantages, educate, and much more.

Data storytelling is more than just aesthetically pleasing graphs and slides. There is a science behind how we perceive and process information, as well as an art to making effective visual design choices. While creating a basic chart or a slide presentation is quick and easy with most tools, designing a clear and focused communication requires time and thoughtful consideration. The ultimate goal is something that is not only readable and usable but also actionable.

This hands-on course will guide students in developing meaningful data stories that reveal visual insights accessible to relevant audiences. Students will learn the fundamentals of Excel, Tableau, and PowerPoint—common data communication and visualization tools in industry—to make sense of and visualize data. Students will also learn how to articulate the stories behind datasets and communicate data findings in visual, oral, and written contexts for various audiences.

There are no prerequisites for this course and no prior programming experience is required. Whether you are a complete novice in data or experienced in data visualization best practices and eager to improve your communication skills, this course is for you. *Students with extensive prior experience should consult the instructor before enrolling.*

LEARNING OBJECTIVES

- Understand the difference between **exploratory** and **explanatory data analysis** and how to effectively apply them
- Apply data analysis and visualization in various **tools**, specifically Excel, Tableau, and PowerPoint
- Choose an **appropriate visual** for the intended message and audience
- Thoughtfully **design charts** that increase understanding and comprehension for the intended audience
- Develop **interactive dashboards** for a specific audience to effectively explore and understand data
- Implement core concepts of **usability** and **accessibility**, like use of whitespace, contrast, text, and color selection
- Build foundational **presentation skills** to engage and influence an audience

MATERIALS YOU WILL USE

Hardware and software

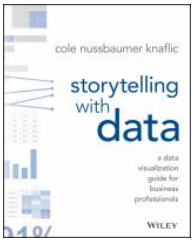
The software packages used in the course are freely available for students.

You can download and install Microsoft Office through the university's Office 365 portal to access **Excel** and **PowerPoint**. We will also use Excel's Analysis Toolpak. Instructions for installing software will be provided to you in the Canvas course.

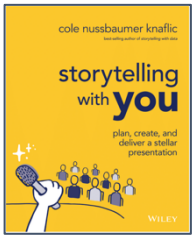
Steps for installing **Tableau Desktop** and obtaining activation keys will also be provided to you during the semester. Your device should meet the minimum requirements to run Tableau Desktop. If you are concerned about this at the beginning of the semester, please reach out to the instructor.

Books and readings provided to you

Our main textbooks for the course are *Storytelling with Data* and *Storytelling with You* by Cole Nussbaumer Knaflic, which will be provided through UT Libraries. We'll also be reading works from other experts in the field. Please refer to Canvas for the list of readings each week.



Knaflic, C. N. (2015). *Storytelling with data: A data visualization guide for business professionals*. Hoboken, NJ: Wiley.



Knaflic, C. N. (2023). *Storytelling with you: Plan, create, and deliver a stellar presentation*. Hoboken, NJ: Wiley.

HOW YOU WILL BE ASSESSED

All assignments, readings, and other essential information will be in the course Canvas site. Assignment weighting percentages are outlined below.

REQUIREMENT	DESCRIPTION	WEIGHTING
Short assignments	Exercises that will complement and reinforce the topics, tutorials, and hands-on work done in class. Specifics will be available on Canvas for each assignment.	50% 10 assignments at 5% each
Dashboard project	Design an interactive Tableau dashboard for exploratory analysis based on a topic of your choice using any open dataset.	25%
Final presentation	Build and deliver a compelling data story for a specific audience. The final project includes a 4-6 minute live presentation to the class.	25%

ASSIGNMENT POLICIES

- Unless otherwise specified, turn in assignments **through Canvas**.
- All assignments are an **individual effort**, not a group project.
- If something occurs and you need an extension on an assignment or another accommodation, **talk to me as soon as possible**. Because of the nature of some assignments, I may not be able to make exceptions without notice.
- Previously graded **assignments cannot be resubmitted** with edits and corrections for a higher grade unless we discuss it in advance of your resubmission.
- **Late assignments will be docked 10 points for each day delayed.**

This is how your final grade will be reported:

	A	B	C	D	F
PLUS (+)		87-89	77-79	67-69	
GRADE	93-100	83-86	73-76	63-66	0-59
MINUS (-)	90-92	80-82	70-72	60-62	

Attendance & participation

Regular attendance and punctuality are expected. A substantial portion of course content includes hands-on labs and activities during lecture. As a result, missing classes and not participating in activities can impact performance and result in a lower grade.

I recognize there are legitimate and personal reasons one might be unable to come to class on a particular day. It's your responsibility to look on Canvas and/or check in with me or your classmates for notes and assignments you missed.

If you must miss a class or an assignment to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence. By UT Austin policy, you must notify me of your pending absence for a religious holy day as far in advance as possible of the date of observance.

If you need attendance waivers or assignment extensions because of an emergency, please reach out to Student Emergency Services at studentemergency@austin.utexas.edu or 512-471-5017 Monday through Friday from 8 AM to 5 PM. The Office of Student Emergency Services exists to support students with issues that impact their well-being and academics, including natural disasters, medical issues, mental health concerns, family emergencies, and more. They can act as an interface between you and me so private or sensitive information is not disclosed to me.

HOW TO SUCCEED IN THIS COURSE

Be open. To succeed in this course, it's important to be open and receptive. Embrace feedback as a valuable tool for growth. Offer thoughtful, constructive criticism to your peers and be ready to receive it as well. This applies to me, too. While I will ask for your feedback at the end of the semester, don't hesitate to share your thoughts whenever something comes to mind.

Be proactive. Make sure to read the assignment instructions thoroughly before the deadline. Please reach out to me with questions or for clarification. Keep in mind that I work full-time at another company and may not immediately respond, so do not wait until the day the assignment is due to ask your questions, as I may not have time to reply. Before submitting your work, review the instructions again to ensure you've covered everything.

Be inquisitive. Curiosity will also serve you well in this course (and life in general). Don't shy away from asking questions or doing some research. For software-related queries, a quick Google search can often provide helpful answers. Learning a new software tool can be challenging, have patience and self-compassion for the learning process. If you're having trouble with something, chances are someone else has faced the same issue. Don't hesitate to

take advantage of office hours if you need to discuss any aspect of the course you don't understand or if you have questions. You can also post on the course discussion board to get help from your course mates, but be thoughtful about adhering to the academic integrity policies.

Be communicative. Communication is crucial. The fastest and most reliable way to reach me is through text or email. Please allow 24 hours for a response. Make sure the primary email address you have recorded with the university is one you check regularly, as that's the email Canvas will use for course communications.

OTHER POLICIES YOU SHOULD BE AWARE OF

Sharing of course materials is prohibited: No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class without explicit, written permission of the instructor. Unauthorized sharing of materials promotes cheating. The University is aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in initiation of the student conduct process and include charge(s) for academic misconduct, potentially resulting in sanctions, including a grade impact.

Academic integrity: Students who violate University rules on academic misconduct are subject to the student conduct process. A student found responsible for academic misconduct may be assigned both a status sanction and a grade impact for the course. The grade impact could range from a zero on the assignment in question up to a failing grade in the course. A status sanction can include a written warning, probation, deferred suspension or dismissal from the University. To learn more about academic integrity standards, tips for avoiding a potential academic misconduct violation, and the overall conduct process, please visit the Student Conduct and Academic Integrity website at: http://deanofstudents.utexas.edu/conduct.

Leverage Artificial Intelligence thoughtfully and carefully: The creation of artificial intelligence tools for widespread use is an exciting innovation. However, its answers can be incomplete, out-of-date, and/or biased. AI should be used with caution and be properly attributed. If you use AI for any assignments, you should include a citation in your Canvas submission along with the prompt(s) used to generate the response. Failing to properly cite AI constitutes a violation of UT Austin's Institutional Rules on academic integrity. If you are considering the use of AI tools but are unsure if you are allowed or the extent to which they may be utilized appropriately, please ask me.

Counseling and Mental Health Center (CMHC): Students who are struggling for any reason and who believe that it might impact their performance in the course are urged to reach out to Bryce Moffett if they feel comfortable. This will allow her to provide any resources or accommodations that she can. If immediate mental health assistance is needed, call the Counseling and Mental Health Center (CMHC) at 512-471-3515 or you may also contact Bryce Moffett, LCSW (iSchool CARE counselor) at 512-232-4449. Bryce's office is located in FAC18S and she holds drop in Office Hours on Wednesday from 2-3pm. For urgent mental health concerns, please contact the CMHC 24/7 Crisis Line at 512-471-2255.

Services with students with disabilities: The university is committed to creating an accessible and inclusive learning environment consistent with university policy and federal and state law. Please let me know if you experience any barriers to learning so I can work with you to ensure you have equal opportunity to participate fully in this course. If you are a student with a disability, or think you may have a disability, and need accommodations please contact Services for Students with Disabilities (SSD). Please refer to SSD's website for more information. If you are already registered with SSD, please deliver your Accommodation Letter to me as early as possible.

Title IX reporting: Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university's relevant policies.

Faculty members are required to report violations of Title IX to the Title IX Coordinator. If you want to speak with someone for support or remedies without making an official report to the university, email advocate@austin.utexas.edu. For more information about reporting options and resources, visit the Title IX Office or email titleix@austin.utexas.edu.

COURSE SCHEDULE

All assignments, readings, and essential information will be on the Canvas website at utexas.instructure.com. Changes to the schedule may be made at my discretion if circumstances require. **Please refer to Canvas for the latest information.** I will announce any changes in class and will also communicate them via a Canvas announcement. It is your responsibility to note these changes when announced, and I will do my best to ensure that you are notified of changes with as much advance notice as possible.

WEEK	LECTURE	TOPIC	DUE BEFORE LECTURE
1	AUG 28	What is data storytelling?	Install software
2	SEP 4	Exploratory analysis with Excel	Welcome quiz (5%)
3	SEP 11	Charts & tables	Excel exercise (5%)
4	SEP 18	Tableau fundamentals	Graph exercise (5%)
5	SEP 25	Aspects of visual design	Tableau exercise (5%)
6	OCT 2	Feedback & critique	Dashboard plan & mockup (5%)
7	OCT 9	Advanced tools & techniques	Dashboard mockup peer feedback (5%)
8	OCT 16	Audience & context	Dashboard project (25%)
9	OCT 23	Components of story	Final presentation storyboard (5%)
10	OCT 30	Slide design	Storyboard peer feedback (5%)
11	NOV 6	Presentation delivery	Slide layout exercise (5%)
12	NOV 13	Ethics in data storytelling	Animation exercise (5%)
13	NOV 20	Final presentations #1	Final project presentation (25%)
14		Fall break (NO LECTURE)	No classes November 24-28
15	DEC 4	Final presentations #2	Attendance in both sessions is required
16		What's next? (NO LECTURE)	Course evaluation