

TCOM 4431 – Information Design II (Spring 2020)

Class Meetings

3:30-4:45 pm Monday & Wednesday | Atrium Building 203, Marietta Campus

Instructor's Contact Information

Dr. Sara Doan
Assistant Professor of Technical
Communication
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Office Phone: (470) 578-7480
Office: Atrium (J) 349 (Marietta Campus)
Office Hours: 4:45-6pm Mon. & Wed., or by
appointment—please ask!

Course Catalog Description (3 credits)

Students apply principles and best practices of effective information design in the context of infographics and the visualization of data in analog, print, and digital media. Students create an analog journal of data visualizations and select one visualization of data to illustrate digitally. Additionally, they create graphs and charts in digital documents, produce an information graphic poster, and analyze their effectiveness.

Prerequisite

TCOM 2010 or permission from the TCID
Department

Retaking Classes

Beginning in January 2012, any student who fails a course at KSU will have one chance to retake the class.

Objectives

By the end of this course, students will:

- Demonstrate continued growth with implementing effective design principles
- Demonstrate further proficiency communicating design principles clearly and effectively
- Prepare a project that demonstrates effective information design techniques.

Course Textbook & Required Materials

You will need the following required materials in order to succeed in this course:

- Access to and readings from D2L
- MS Word and PowerPoint 2010 or later (Use [these instructions](#) to download it for free from KSU)
- [Adobe Reader](#)
- a USB drives
- an Internet-connected computer
- bandwidth to play streaming mp4 video
- **Recommended:** Adobe InDesign, r

Email Use

Follow these guidelines to contact me:

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- **Use your KSU email address** (ending with @students.kennesaw.edu) for all out-of-class communication with me. KSU policy and federal law require me to exclusively use your KSU email address to contact you about the course.
- **Contact me primarily through KSU email**; messaging through D2L may be delayed because of KSU's servers. Answering KSU email is much faster!
- **Practice professionalism and politeness** by using email strategies listed [here](#). Contacting me about the course is included in your professionalism grade.
- **Expect responses only during business hours**; I limit my email use to 9am-5pm on weekdays, so expect a reply within 48 hours.
- **Wait to contact me at least 24 hours after grades/feedback appear on D2L** if you would like to discuss your grade. I am not available to discuss grades via email; we can set up an in-person appointment to discuss feedback.
- **Set up an appointment or stop into office hours** if you want to meet with me in person or via webchat. My office has snacks!

D2L Announcements and Individual Emails

- **Set up D2L to send announcements to your KSU student email account.** I post class-wide announcements to D2L instead of sending individual emails.
- **Check your KSU email and D2L** every day; keep yourself up to date. If you have problems with missing assignments, excessive absences, or other issues, I will contact you individually via KSU email.

Understanding Course Grades

Your grades/feedback will appear on D2L within 14 days of the assignment's due date.

Grading Criteria for Major Assignments

- A** The document is superior. It exceeds all the objectives of the assignment. The information is ethical, sophisticated, thorough, and ideally suited for the audience. The style is clear and appropriate to the subject, purpose, and audience. The document's organization and design make the information understandable, accessible, and usable. The mechanics and grammar are correct.
-
- B** The document is good. It meets the objectives of the assignment but requires minor improvements or reveals easily correctable errors in organization, style, design, grammar, or mechanics.
-
- C** The document is adequate. It omits useful information or requires significant improvement in organization, style, design, grammar, or mechanics. It may be formally correct but superficial in its discussion.
-
- D** The document is disappointing. It meets some of the objectives of the assignment but ignores others; the discussion is inadequately developed, omits important information, or displays numerous or major errors in organization, style, design, grammar, or mechanics.
-

F The document is unacceptable at the university level. It omits critical information, does something other than the assignment required, or displays major or excessive errors in organization, style, design, grammar, or mechanics.

Major (Required) Assignments

Skills assessment, personalized data visualization, & data set selection	20%
Weekly factbook charts	15%
Completed Factbook	25%
Chart presentation & short paper	15%
Interactive dashboard -or- analysis	15%
*Participation & Professionalism	10%

Note: To pass the class, you must complete the main part of each major assignment.

*Participation & Professionalism is not a major assignment.

Final Grade Breakdown

Grade	Range
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

Privacy

FERPA, a federal law, does not permit me to discuss individual grades in class or, except in certain cases, reveal your grades to anyone else. See [KSU's official FERPA policy here](#).

Revision Policy

You will receive feedback from me on your drafts in class or on D2L; therefore, all graded submissions are final. If any revision is allowed, you must have submitted the original assignment to receive credit.

Extra Credit

I may or may not offer opportunities for extra credit; however, I unable to grant any requests for extra credit.

Turning in Assignments

Upload all major assignments in the correct D2L dropbox in a file format that I can open.
Emailing me assignments is only acceptable in case of emergency.

If you do not own a computer or if you are going to be out of town, it is still **your responsibility to complete and submit your assignments on time.**

Save all your files in multiple places.
Technology emergencies happen but are not approved reasons for late work.

All assignments are automatically submitted through **plagiarism detection software.**
University academic integrity policies apply.

Late Work

Major Assignments

The assignments listed in the "Required Assignments" section above are major assignments. **After a grace period of the first 24 hours, you will forfeit 10% of your assignment grade per day.** You can submit all parts of major assignments until the last day of class, for partial credit. The main part must be of at least "C" quality to be accepted. It will receive a zero, and it will not receive comments, but you will be eligible to pass the class.

Extenuating Circumstances

If you have extenuating circumstances, let me know at once. Life happens. If you are honest and prompt in communicating with me, we can try to work something out.

Participation & Professionalism

Submit smaller assignments, quizzes, etc. on time. They cannot be submitted late. If you know that you will be away from class, ask me about making arrangements in advance.

Attendance

Non-attendance (or non-completion) does not constitute a withdrawal. Your attendance record is posted on D2L under "Attendance."

Tardies

If you arrive 10 or more minutes late, you are tardy. Three tardies count as one absence. Any in-class grade that you miss cannot be made up and will receive a zero.

Absences

Our time together is important. When you miss a class, you miss discussions, group activities, updates on upcoming assignments, and details that cannot be made up outside of class. If you're away for university-sanctioned events, contact me in advance to make alternative arrangements.

Missing more than six classes—three weeks of class—will result in a 0 in your final participation grade. The highest grade you can earn in this class with more than six absences is an 85%. Keep in mind that excessive absences will probably cause you to miss material and in-class feedback that you'll need to complete major assignments well.

Emergencies

If you have an emergency that interferes with your ability to participate in the course (illness or death of a family member, serious illness, surgery, accident, childbirth), I may be willing to adjust deadlines as long as you contact me in advance and provide documentation. You will need to meet our adjusted deadline to receive full credit.

Participation & Professionalism

Attendance, participation, and professionalism count for 10% of your grade. Because this is a design course, we will (kindly!) critique your work in front of the class.

Here are the behaviors that would likely earn you a **B grade**:

- asking and answering questions
- making comments or suggestions for improvement (extra points for comments that relate to readings, and for sharing relevant experiences).

Here are the **value-added behaviors**—the ones that would likely **earn you an A**:

- responding to something another student says (including answering a question asked by a student)
- constructively disagreeing with something in the text or said by me or another student.

And there are **behaviors to avoid** (likely a **C or lower**):

- engaging on a surface level with course ideas
- pretending to be listening while texting, doing homework for other classes, or surfing online
- making fun or otherwise berating something said or created by another person.

Every day after class (or during), **write down what you contributed**—the question you asked, the answer you gave, the comment you made, etc. At mid-term I'll ask you to submit a short summary on D2L. I'll compare your record with mine and give your feedback indicating your grade if your current level of participation continues. I'll also make some suggestions for improvement.

Academic Integrity



Every KSU student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Department of Student Conduct and Academic Integrity (SCAI) [website](#) and in each year's student handbook. The Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating; unauthorized access to University materials; misrepresentation/falsification of University records or academic work; malicious removal, retention, or destruction of library materials; malicious/intentional misuse of computer facilities and/or services; and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established SCAI misconduct [procedures](#).

Click this link for [a useful guide to understanding and avoiding plagiarism](#). For more details, click this link for [the official KSU Academic Honesty policy](#). If you have questions about what constitutes plagiarism, please ask before an assignment is due, as I'm happy to assist you.

Creating a Positive Campus Environment



It is the purpose of the institution to provide a campus environment which encourages academic accomplishment, personal growth, and a spirit of understanding and cooperation. An important part of maintaining such an environment is the commitment to protect the health and safety of every member of the campus community.

Belligerent, abusive, profane, threatening and/ or inappropriate behavior on the part of students is a violation of the Kennesaw State University Student Conduct Regulations. Students who are found guilty of such misconduct may be subject to immediate dismissal from the institution. In addition, these violations of state law may also be subject to criminal action beyond the University disciplinary process.

If you have concerns about anyone's behavior in the course (whether that person is yourself, a classmate, or me), please speak to me. I take your concerns seriously.

Student Rights and Responsibilities

If you feel you have been treated unfairly, consult the KSU Student Catalog. Click the "Statement of Student Rights and Responsibilities" link in the list at page right. It is your official guide to the rules that govern KSU.

Accessing University Resources

Food and Housing Insecurity

If you have difficulty affording groceries or accessing sufficient food to eat every day, or lack a safe and stable place to live, [contact the Dean of Students Office for support](#). If you are comfortable doing so, please let me know. I am happy to connect you with campus resources.

Your Computer

If you have troubles with your computer or D2L, [contact the KSU Student Helpdesk](#) for free assistance.

Writing Assistance

For extra (free!) assistance to help you develop and polish your writing, from idea generation to polishing final drafts. For more information, or to set up an appointment, email Ms. Taylor through the English-Second-Language center (ktay1150@kennesaw.edu) or Dr. Race (crace@kennesaw.edu).

Student Disability Services

Kennesaw State University provides program accessibility and reasonable accommodations for persons defined as disabled under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act.

If you have a disability and think you may need accommodations in this class, it is your responsibility to register with SDS, obtain disability documentation, and set up a meeting with me to discuss an accommodation plan ASAP; note that accommodations are not retroactive.

Contact SDS via the web (<https://sds.kennesaw.edu/index.php>) or by phone (470-578-6443).

Student Success Services

If you are having troubles with school or life in general, contact Student Success Services. Please take advantage KSU's resources; it's okay to ask for help. KSU offers the following programs to help you succeed:

- Counseling and Psychological Services
- Disability Testing
- Help for homeless KSU students
- Student Athlete Success Services
- Center for Young Adult Addiction and Recovery
- Parent & Family Association
- Veterans Resource Center
- Women's Resource & Interpersonal Violence Prevention Center

KSU Student Resources

This course complies with all of the policies found here https://curriculum.kennesaw.edu/resources/ksu_student_resources_for_course_syllabus.php and here https://curriculum.kennesaw.edu/resources/federal_bor_ksu_student_policies.php

Changes to the Syllabus

Policies and dates in this syllabus and schedule are subject to change. You will be notified of amendments to the course policies or schedule on D2L.

Original (Pre-COVID-19) Calendar

Week	Start Date	Topic	Major Assignment due
1	January 6 (Monday)	Why is data visualization important? <ul style="list-style-type: none">• Visualizing data, information, knowledge, and wisdom	
2	January 13 (Monday)	What makes data tell stories? <ul style="list-style-type: none">• Questions for analysis• Two truths and a lie with data	
3	January 20 (Monday)	How do we visualize data? <ul style="list-style-type: none">• How	Skills assessment, personalized visualization & data set options due
4	January 27 (Monday)	Charting time <ul style="list-style-type: none">• Bar & stacked bar charts• Stacked area charts• Minard line graph	

5	February 3 (Monday)	Charting parts of a whole <ul style="list-style-type: none"> • Pie charts • Rose diagrams • Rectangular treemaps 	(Chart Presentations weekly)
6	February 10 (Monday)	Charting processes <ul style="list-style-type: none"> • Flow charts • Waterfall charts • Gantt charts 	
7	February 17 (Monday)	Charting relationships <ul style="list-style-type: none"> • Tree charts • Scatterplots & trendlines 	
8	February 24 (Monday)	Mapping data <ul style="list-style-type: none"> • Heat maps • Topographic maps • John Snow's cholera map • Choropleth maps • Booth's poverty maps 	
9	March 2 (Monday)	Misc. charts I <ul style="list-style-type: none"> • Stream graph • Fan chart 	
10	March 9 (Monday)	Misc. charts II <ul style="list-style-type: none"> • Box plots • Candlestick charts • Dumbbell charts • Bump charts 	
11	March 16 (Monday)	Chartjunk & isotypes <ul style="list-style-type: none"> • Nigel Holmes diamonds chart • Otto and Marie von Neurath's isotypes 	
12	March 23 (Monday)	Reviewing chart types	
13	March 30 (Monday)	Spring break!	
14	April 6 (Monday)	Creating factbooks as narratives	Factbook due
15	April 13 (Monday)	Interactive data displays	
16	April 20 (Monday)	Using color & animation	
Finals	April 27 (Monday)	Wrapping up	Dashboard or analysis due

Revised (Post-COVID-19) Calendar

During Spring 2020, instruction was suspended on March 16 & 17 to give instructors time to move classes online; instruction for Spring 2020 resumed online on March 18.

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Week	Start Date	Topic	Major Assignment due
10	March 9 (Monday)	Factbook progress <ul style="list-style-type: none"> • Micro- and Marco-factbook assessment due • Discussed COVID-19 charts in the news 	
11	March 16 (Monday)	Factbook progress <ul style="list-style-type: none"> • Micro- and Marco-factbook assessment due 	
12	March 23 (Monday)	Chartjunk & isotypes <ul style="list-style-type: none"> • Nigel Holmes diamonds chart • Otto and Marie von Neurath's isotypes 	
13	March 30 (Monday)	Spring break!	
14	April 6 (Monday)	Chartjunk & isotypes <ul style="list-style-type: none"> • Nigel Holmes diamonds chart • Otto and Marie von Neurath's isotypes 	
15	April 13 (Monday)	Creating factbooks as narratives	Factbook draft due
16	April 20 (Monday)	Polishing and revising factbooks <ul style="list-style-type: none"> • Peer response 	
Finals	April 27 (Monday)	Wrapping up	Factbook due Reflection discussion due

Class Structure

Monday: Lecture day

- Reading quiz
- Analysis activity with chart and semester-long questions:
 - What do you notice about the chart, especially about the chart's interactive elements?
 - What does this chart do well?
 - What story does this chart tell?
 - How well does the annotation layer (title, caption, data labels, etc.) add to the story?
 - What can we, as designers, learn from this chart?
- Chart presentation(s)
- Lecture about chart genres
- Activity (sharing good/bad examples, examining annotation layers, etc.)

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Wednesday: Lab Day

- Quick chart analysis
- Tutorial
- Lab time to produce charts and share knowledge; charts due Sunday nights.

Major Assignments

This assignment contains two parts: A Skills Assessment and a Not-Digital Visualization. Submit these pieces within the same document, in memo format, and separated by page breaks.

Skills Assessment & Not-Digital Visualization – 20%

For the skills assessment, **write at least 500 words addressing the following questions:**

- What background and knowledge do you already have in areas that will help you succeed in this course: information design, graphic design, statistics, digital design, print production, etc.?
- What strengths do you bring to our course? What challenges do you anticipate? How might you plan ahead to meet these challenges?
- How comfortable are you with technologies like Microsoft Excel, Adobe InDesign and Illustrator, r, Tableau, etc.?
- When you create your factbook ([click here for an example factbook](#)) this semester, what software programs do you feel most comfortable using? What programs might you want to experiment with, or learn more about?
- For your data set options, select between 1-3 data set(s) from the [Sample Datasets Module](#) to use when creating your factbook. What audience do you have in mind for this factbook?
- Is there anything else you want me to know about your learning this semester?

For the not-digital visualization, track data from one aspect of your life for one week, without using digital technologies. This assignment is meant to focus your attention on the data and its presentation before introducing digital technologies. You might draw, carve something out of wood, craft with paper, knit, etc.

Include 1-3 pictures of your visualization and a short (50-100 word) description of what and how you visualized your data.

Chart Presentation & Report – 15%

This semester, you'll select one **class reading** or a specific **data visualization type** to analyze (for example, Florence Nightingale's rose diagrams or John Snow's cholera map). You'll deliver your analysis in two different forms:

- A 5-7 minute presentation in class

- A 2-page, single-spaced report in memo format.

Use these questions to guide your presentation and analysis:

- Who are the audiences for this data visualization? What visual cues tell you this?
- In what context did this data visualization originally appear? What visual cues tell you this?
- What can we, as data designers, learn
 - about data literacy practices from this visual?
 - about design practices from this visual?
 - about print or screen publishing from this visual?

Upload your presentation slides at least 1 hour before class.

Weekly Factbook Charts – 15%

Here's an example of the assignment sheet for creating charts each week:

Use your factbook data set to create and submit each of these charts: heat map, mind map, or topographic map.

Creating a Factbook – 25%

Create a factbook that tells micro-level and macro-level stories about a single data set. You'll be creating the data visualizations for your factbook in class for over a total of eight weeks, then revising your visualizations based on my feedback.

Telling Micro-Level Stories

Each of the **15-20 charts and graphs** that you include in your factbook should tell a micro-level story about your data. You'll need to include at least **12 different types of charts**. Include a descriptive **caption** for each visualization.

Creating a Macro-Level Narrative

As a whole, your entire factbook needs to tell a **compelling macro-level story** about how all of your data visualizations fit together in a narrative. As with any narrative, you need to have a specific audience that you're creating this macro-level narrative for, such as:

- City of Marietta
- Cobb County Government
- Kennesaw State University
- Habitat for Humanity
- a heavy metal fan subreddit

"Print" or Digital? You Decide

You may choose to create a print-based factbook (submitted as a PDF) or a digital factbook (submitted as a hyperlink to a portfolio or Adobe Spark site). In either case, you'll need to use

effective design strategies such as layout, figure-ground contrast, font choice, visual hierarchy, direction, and color.

Encouraging Your Learning

I'm leaving these assignment guidelines open-ended because I want to encourage you to take risks with technologies and design strategies. Always feel free to email or stop by office hours with questions.

Interactive Visualizations (Dashboard or Report) – 15%

(Replaced with reflection discussion due to COVID-19.)

For this assignment, you have a choice between creating two final projects:

1. creating three related interactive data displays
2. writing a 2-page report analyzing an interactive data display.

Interactive Data Displays

You will create three interactive data displays about a single topic. These data displays can cover the same topic as your factbook but must be new material not previously made or submitted for this course. You will host these on your portfolio or an Adobe Spark website, then submit a hyperlink to your assignment.

Analysis Report

You will write a 2-page memo analyzing an interactive data display, much like the memo that you submitted for the Chart Presentation and Report assignment. You will find your own interactive data display for your analysis. In addition to the questions we've considered this semester, focus on how the interactivity affects design strategies, accessibility, and the display's purpose, audience, and context.

Reflection Discussion – 15%

Part I: What You've Learned

What is the most important thing that you've learned in this class? How will you use this new knowledge or skill in future classes and your professional life?

Part II: Interactive Data Visualizations

You have two options for the second half of your post:

1. Create and post an Interactive Bar Chart using the directions from the now defunct dropbox. Include a short description of the bar chart, including 2-3 visual design choices you made when creating it.
2. Use the following questions to analyze an interactive data visualization. You may use the examples from Week 16 or find your own.

Link your data visualization or embed it within your post.

- a. What do you notice about the chart, especially about the chart's interactive elements?
- b. What does this chart do well?
- c. What story does this chart tell?
- d. How well does the annotation layer add to the story?
- e. What can we, as designers, learn from this chart?