

# 94870-C1

*Syllabus subject to change.*

**Course No:** 94-870, 94-470

**Course Name:** Telling Stories with Data

**Section:** C1

**Day:** Tuesdays and Thursdays

**Time:** 9:30 AM - 10:50 AM

**Location:** HBH 1006 (C1)

## Professor

Chris Goranson ([cgoranso@andrew.cmu.edu](mailto:cgoranso@andrew.cmu.edu) (<mailto:cgoranso@andrew.cmu.edu>)), Hamburg Hall 2105B.

Office hours will be posted on Canvas; also available by appointment.

## Teaching Assistant (TA)

Sharvari Yeole ([syeole@andrew.cmu.edu](mailto:syeole@andrew.cmu.edu) (<mailto:syeole@andrew.cmu.edu>)). Office hours will be posted on Canvas.

## Course website

<https://canvas.cmu.edu/courses/>

## Course description

Data are everywhere. For policy makers, the ability to tell the right story using data can make the difference between a successful initiative and one that fails. Part art, part science, visualizing data is a process that is both well established in existing disciplines and experimental and rapidly changing in others. In this course we'll explore both ends of the spectrum as we deconstruct and reconstruct data visualizations behind some of the world's most powerful brands, dig into our own data in compelling ways to help our readers understand complex issues, and finally experiment with new ways to represent data about our work, our community, and even ourselves. This course will provide hands-on training and experimentation with a number of tools, and students will have some flexibility to concentrate on mediums that best match their desired outcomes for a final project deliverable (print, digital, interactive or immersive). By the end of this course, students will have an introduction to a number of different tools and techniques that will allow them to immediately start applying what they've learned to both other coursework as well as on-the-job needs.

## Prerequisites

This course is designed as a graduate-level experience for students that have at least basic computer proficiency and writing skills. Since we'll be creating digital artifacts in this course including publicly-available websites, you should feel at least somewhat comfortable writing narrative-driven stories, reports, and the results of data analysis. Likewise, you should be at least somewhat familiar with correctly citing source materials used, the basics of paraphrasing, and applications of U.S. copyright law to images and written content. See the excellent library guide at <https://guides.library.cmu.edu/usingimages> (<https://guides.library.cmu.edu/usingimages>) for more. If you have questions about what I mean by all of this, please ask!

Since we work with data in this course, you should also feel comfortable working with spreadsheets, and present a willingness to learn something slightly outside of your comfort zone. You do not need in-depth statistics or mathematics skills, although those can certainly be helpful when conducting your own analysis. You will also likely find additional areas of this course to explore on your own.

## Learning objectives and goals

1. Create a publicly accessible portfolio of work.
2. Create data visualizations following good design practices (color, text, layout, choice of visualization, etc.) in a digital format.
3. Critique data visualizations by applying various critique methodologies, and be able to justify your own design decisions and recommendations.
4. Develop and present a narrative suitable for a subject audience for a selected topic that is clear, compelling and persuasive.
5. Conduct user research to ensure data visualizations and the supporting narrative are being communicated effectively.
6. Apply methods for explaining and presenting data, constructing and telling a story using that data.

## Course materials

There are two required texts for this course.

**Berinato, S. (2023). Good Charts, Updated and Expanded: The HBR Guide to Making Smarter, More Persuasive Data Visualizations. Boston, Massachusetts: Harvard Business Review Press.**

**Berinato, S. (2019). Good Charts Workbook: Tips, Tools, and Exercises for Making Better Data Visualizations. Boston, Massachusetts: Harvard Business Review Press.**

You can purchase a discounted (PDF) copy of each text for \$17.50 each (half off the list price, \$35 total) by visiting the following link and registering with a free account:

<https://hbsp.harvard.edu/import/1176378>  [\\_ \(https://hbsp.harvard.edu/import/1176378\)](https://hbsp.harvard.edu/import/1176378)

Hardcopy or a PDF version are options you can select on checkout, but a hardcopy of the text is \$35. Sketching exercises in this course use the Good Charts Workbook - so you may prefer a hard copy version of that text. **You are of course welcome to check prices from other providers (e.g. B&N, Amazon, etc.) - you may find a better deal!** If you do so, make sure to get the correct, updated versions of the texts above.

Hunt Library also has both books on reserve for physical check out. (Note that the Good Charts text is the 2016 version, we are working to get the updated version released in 2023).

[https://cmu.primo.exlibrisgroup.com/permalink/01CMU\\_INST/qtqgla/alma991016735969704436](https://cmu.primo.exlibrisgroup.com/permalink/01CMU_INST/qtqgla/alma991016735969704436)

 [\\_ \(https://cmu.primo.exlibrisgroup.com/permalink/01CMU\\_INST/qtqgla/alma991016735969704436\)](https://cmu.primo.exlibrisgroup.com/permalink/01CMU_INST/qtqgla/alma991016735969704436)

[https://cmu.primo.exlibrisgroup.com/permalink/01CMU\\_INST/qtqgla/alma991019894313304436](https://cmu.primo.exlibrisgroup.com/permalink/01CMU_INST/qtqgla/alma991019894313304436)

 [\\_ \(https://cmu.primo.exlibrisgroup.com/permalink/01CMU\\_INST/qtqgla/alma991019894313304436\)](https://cmu.primo.exlibrisgroup.com/permalink/01CMU_INST/qtqgla/alma991019894313304436)

If you need immediate electronic access to the texts, you can access them here:

Good charts : the HBR guide to making smarter, more persuasive data visualizations

[https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?](https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1798420&site=ehost-live&scope=site)

[direct=true&db=nlebk&AN=1798420&site=ehost-live&scope=site](https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1798420&site=ehost-live&scope=site)  [\\_ \(https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1798420&site=ehost-live&scope=site\)](https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1798420&site=ehost-live&scope=site)

Good Charts Workbook: Tips, Tools, and Exercises for Making Better Data Visualizations

[https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?](https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1797862&site=ehost-live&scope=site)

[direct=true&db=nlebk&AN=1797862&site=ehost-live&scope=site](https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1797862&site=ehost-live&scope=site)  [\\_ \(https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1797862&site=ehost-live&scope=site\)](https://search-ebSCOhost-com.cmu.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1797862&site=ehost-live&scope=site)

You will need to create your own Ebsco account, and **both are limited use**. So, the online access isn't a good, permanent substitution for having your own copy, but it can help you out while you wait for your own copy to arrive in the first week or two if need be.

## Sketching materials

Sketching exercises are designed for you to further develop your understanding of color theory, data visualization taxonomies, design and other key elements of data visualization best practices. **As such, you'll likely benefit from picking up a set of colored pens for this course.** Pens are generally preferable to pencils since you'll be posting images of your visualizations for various assignments and they will render darker (but pencils are fine if that's what you have already).



A basic set will work just fine - I'd recommend finding one that includes a good range of colors (red, blue, yellow, green, purple, etc.) to allow you to draw crisp, clear lines and shade areas. The CMU Art Store has a good selection of higher-quality options that you can try out yourself if you're so inclined.

For most sketching exercises you're also welcome to complete them digitally using an iPad or other device.

## Other texts

Other texts sometimes referenced in the course materials are available electronically for free (some require your AndrewID to access, others are available online). We won't use these extensively but they're great references for you beyond the course:

**Dougherty, Jack, and Ilya Ilyankou. *Hands-On Data Visualization*. 1st ed. O'Reilly Media, Inc., 2021.**

You can also access most of the content from the book at <https://handsondataviz.org/> , which is a pretty unusual and generous resource provided by the authors. You can read more about their decision to make this text open access [here](https://handsondataviz.org/open-access.html)  (<https://handsondataviz.org/open-access.html>).


**Knaflic, C. (2015). *Storytelling with data : a data visualization guide for business professionals*. Hoboken, New Jersey: Wiley.**

This text should be available as a downloadable ebook once you're logged in using your Andrew ID and accessing it from the CMU network through the following link:

<https://onlinelibrary.wiley.com/doi/epub/10.1002/9781119055259>   
(<https://onlinelibrary.wiley.com/doi/epub/10.1002/9781119055259>)

**[The Data Journalism Handbook](http://datajournalismhandbook.org/1.0/en/index.html)** , (<http://datajournalismhandbook.org/1.0/en/index.html>).

Accessible electronically at <http://datajournalismhandbook.org/1.0/en/index.html>   
(<http://datajournalismhandbook.org/1.0/en/index.html>)

**Data + Design by Trina Chiasson and Dyanna Gregory.** (Website appears to be unavailable - however you can find a [PDF version of the text here](http://orm-atlas2-prod.s3.amazonaws.com/pdf/13a07b19e01a397d8855c0463d52f454.pdf) , (<http://orm-atlas2-prod.s3.amazonaws.com/pdf/13a07b19e01a397d8855c0463d52f454.pdf>)).

In addition,

- Readings and videos provided on Canvas
- Slides used in lectures for note-taking on Canvas
- Dataset provided on Canvas or through external links

And, if you want to explore information design and develop a more personal connection to your own data, check out:

**Observe, Collect, Draw!** by **Giorgia Lupi and Stefanie Posavec** (ISBN: 9781616897147). \$13 - 19 on Amazon.

## Calendar

## Week zero

The week before the course is a good opportunity to review the Getting everything set up guide on Canvas, and purchasing the required texts and materials.

## Week one

\*\* First class is Tuesday, August 27th.

Assignments:

- In-class sketching exercise. You may find it helpful to have some paper and colored pens / pencils on hand for the exercise (although not required). You are also welcome to complete the exercise digitally (e.g. on an iPad) if you prefer.
- Controlling Color - week one sketching exercise (due 11:59 p.m., Mon 09/02)
- Data visualization critique #1 (due 11:59 p.m., Mon 09/02)
- In-class critique: Data viz critique #1 (due end of class, Tue 09/03)
- Personal portfolio (due 11:59 p.m., Tue 09/03)\*

\* Note that the personal portfolio assignment is due on Tuesday instead of Monday. This is to give you extra time to troubleshoot any technical issues for those less familiar with Github.

## Week two

Assignments:

- Data visualization #1 (due 11:59 p.m., Tue 09/10)
- Crafting for Clarity- week two sketching exercise (due 11:59 p.m., Tue 09/10)

## Week three

Assignments:

- Assignment 3&4: Critique by Design (due 11:59 p.m., Wed 09/18)\*
- No sketching exercise this week

\* Note that Assignment 3&4 has an extended deadline. This is to give you extra time to complete the assignment. You should expect to spend between 7 -9 hours over the course of the week completing this assignment.

## Week four

### Mid-course feedback and assessment (~10 min)

Assignments\*:

- In-class critique: part one (Tue 09/24, end of class)
- Choosing Chart Types - week four sketching exercise (due 11:59 p.m., Tue 09/24)
- Final Project, part one (due 11:59 p.m., Tue 09/24)

- Final Project, part one avoiding plagiarism quiz (due 11:59 p.m., Tue 09/24)

\* This is to allow for an in-class critique before you turn in your work.

### Week five

Assignments\*:

- In-class challenge exercise (Tue 10/01, end of class)
- Practicing Persuasion - week five sketching exercise (due 11:59 p.m., Thu 10/03)
- In-class critique: part two (Thu 10/03, end of class)
- Final Project, part two (due 11:59 p.m., Thu 10/03)

\* This is to allow for an in-class critique before you turn in your work.

### Week six

Assignments:

- Final Project, part three (due 11:59 p.m., Fri 10/11)
- Cleaning up your online portfolio (due 11:59 p.m., Fri 10/11)
- No sketching exercise this week

### Week seven

Assignments:

- In-class challenge exercise (Tue 10/08, end of class). See other assignment due dates from week six.
- Your attendance is required for both days, since you'll be providing a critique for the final presentations. At the end of the presentations, we'll recap a few things we learned and talk about where you can go from here (as time allows).

**\*\* Final presentations** will be held the last week, on **October 8th and October 10th** during class. **\*\***

## Assessments

The final course grade will be calculated using the following categories:

Assessment	Percentage of Final Grade
Online portfolio	10%
Data visualization critiques	20%

Data visualization workshops 20%

Final project 40%

Class participation and attendance 10%

## Setting up and maintaining your online portfolio - 10%

One of your first activities will involve setting up your online portfolio. You'll be responsible for staging the online portfolio on-line either through one of the suggested methods discussed in class or through an acceptable alternative method. The online portfolio will serve as your public-facing work folder, where you'll collect relevant data visualization critiques, workshop materials and information related to your final project. The online portfolio will also serve as a record of your accomplishments in the course so you can easily refer back to it later, and use it as a resource for future work and / or whatever career path you choose.

You'll be graded on developing your online portfolio on-time and with all the necessary components identified when this topic is covered during the course. As the course progresses, it will be your responsibility to keep this content fresh, reflecting your progress in the course as your work materials evolve.

You will also be graded at the end of the course for how well you've maintained your portfolio.

## Assignments - 40%

Assignments are made up a few different categories as described in more detail below. Please note that there is also an in-class participation component to some assignments. In-class critiques and challenge exercises will also count towards your assignments grade, which includes the data viz workshops and the critique assignments. On the days offered, you need to attend and actively participate in the in-class critiques and challenge exercises to receive credit for these.

### Data Visualization Critiques - 20%

During this course you'll complete two activities related to critiquing existing data visualization materials. In many cases these will be government reports supported by data. It will be your job to critique these visualizations using a rubric and your own insights from what you learn during this course to develop informed opinions and recommendations. Some data visualization critiques may also involve recreating the original data visualization using one of the tools you've learned in the class.

You will be graded on how well you are able to disassemble the aspects of the data visualization, strategically identify both the positive and negative aspects of the visualization, and develop insights about the target audience among other things. Your findings must be based in well articulated

insights developed from the heuristics you assemble more than subjective observations that have little to no context on the issue the data visualizations are addressing.

## Data Visualization Workshops - 20%

The data visualization workshops will be another core component of your course, and will provide you with a hands-on opportunity to demonstrate your proficiency in a number of tools and techniques you learn during this course.

For each data visualization workshop, you will select a dataset and use it to tell a story. Using what you've learned in class and one of the identified technical tools, it will be your job to construct a compelling narrative and data visualization that can stand up to the critique methodologies you learned in previous coursework. You will be graded on how well you can both articulate your story through the data visualization as well as how you construct the elements found in the data visualization.

## Final project - 40%

The final project will be your opportunity to put everything you've learned so far into action. A core goal of the final project will be understanding your audience and ensuring you are communicating at an appropriate level, and telling the story using data visualization methods that are meaningful.

1. **Part I: a project proposal.** An outline of your project, copies of data, and the identified method you'll use for presenting.
2. **Part II: Sketches, wireframes, storyboards.** User research and incorporating user feedback.
3. **Part III: Final deliverable and presentation.** The final deliverable can be a website, presentation, interactive work, etc., and should be publicly accessible. You'll prepare and present a lightning talk for your final presentation.

Additional information about the final project will be provided later in the course.

## Workshop sketches - 10%

Workshop sketches are discussion board activities that give you a chance to experiment and refine your own data visualization skillset. In the case a sketching exercise is waived, any remainder may be based on participation during in-class exercises, discussions, critiques and participation in discussions on Canvas and during class. Sketching exercises will not be accepted late as they reflect your timely participation in the course, which is necessary for others to learn from each other (see below for more on the course's late-work policy).

## Grading Policies

**Late-work policy:** It's really, really important to stay current with assignments in this class as we tend to move quickly and they tend to build on the previous assignment's materials. Please note that late



work for this course will not be accepted after the due date (except as specified below) unless previously arranged with the professor to do extraordinary circumstances (for example, illness, family emergency, out of town). This helps keep things fair for those in the class who were able to complete their work on time, especially considering for certain assignments we'll review them in a class following the due date.

First late assignment\*: 25% penalty, if submitted within 8 hrs of original deadline. Assignments more than 8 hrs late won't be accepted.

Second late assignment\*: 50% penalty, if submitted within 8 hrs of original deadline. Assignments more than 8 hrs late won't be accepted.

Third (or more) late assignment\*: not accepted.

\* Sketching exercises, in-class activities including critiques and final presentations **will not be accepted late** as they reflect your timely participation in the course, which is necessary for everyone to learn from each other.

**Re-grade policy:** If you think there has been a technical error in the grading of your assignment, you should e-mail the grader within one week of receiving the grading assignment, otherwise the assignment will not be regraded. You must provide justification for the re-grade in writing along with your request. Assignments older than one week will not be regraded.

**Assignments posted to Github:** A lot of our assignments end up being posted to Github in this course. If you are new to Github, you should note that Github also keeps a history file, which is essentially a running list of your edits, and the dates / times they were created. So, avoid the temptation to edit your work after a deadline. It's really important that your assignments are done on time, and that you're not editing your Github page after the due date. For certain assignments, this becomes even more critical given the in-class critiques.

**If you're having a problem meeting a deadline I'd prefer you just reach out to me directly.**

## Course Policies

### Academic Integrity & Collaboration

This course will follow Heinz College policies on ethics and discipline as stated in student handbooks.

A specific policy of this course is as follows:

**Homework assignments:** Do not copy or modify homework solutions for your homework solutions. Homework must be individual work unless otherwise stated. You may consult each other on clarification, technical and conceptual issues, but you must do individual problem solving and derive your own solutions, including your own computer work.

Data visualization critiques and analysis should also be your own work - not the reposting of analysis done by someone else and / or found somewhere else on the internet. Content for your final project also needs to be your own work, and any images used should not infringe on someone else's copyright. It is your responsibility to ensure you adequately cite all materials used correctly in this course. Further guidance on acceptable use of imagery can be found on Canvas.

You are not permitted to be in possession of or reference any assignments from another student or other source either from the current semester or from past semesters, whether they are electronic or paper. Possession of or the sharing such files constitutes an infraction of the academic integrity policies of this course.

You are not permitted to create, edit or revise assignments submitted electronically (e.g. on Github) after the due date. The only real exception to this is during the portfolio cleanup process the last week of class. More information is specified in that assignment's instructions.

**Working with AI tools like ChatGPT, DALL-E, etc:** Working with AI tools is an emerging skill and as such I want you to get exposure to using it to problem-solve and how it can be helpful in other situations. Therefore, in some instances you'll be welcome to use generative AI programs (ChatGPT, DALL-E, etc.) in this class.

However, your responsibilities as a student remain the same. **You must follow the academic integrity guidelines of the university and of this class.** So, if you use one of these generative AI tools to develop content for an assignment, you are required to cite the tool's contribution to your work. So, while you can use generative AI tools to do things like brainstorm and / or work to develop a better understanding of a problem (much like you would using a search engine), cutting and pasting content from any source without citation would be considered plagiarism. Paraphrasing content from a generative AI without citation is plagiarism. Likewise, using any generative AI tool without appropriate acknowledgement will be treated as plagiarism. The [university's policy on plagiarism \(https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html\)](https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html) applies to all un-cited or improperly cited use of work, whether that work is created by human beings alone or in collaboration with a generative AI.

Examples of how you might use AI tools for this class include:

- Brainstorm approaches to hard-to-solve policy questions by fusing ideas and information together
- Further refine ideas for a story narrative, structures, or approaches to your work
- Research topics, or generate different ways to talk about a problem
- Generating images for the final project, with citation.

Examples of unacceptable use of AI tools in this class include, but are not limited to:

- Generate content that you cut and paste into an assignment with a written component without quotations and a citation
- Generate content that is not adequately paraphrased without a citation

- Generate bibliographies for topics that you haven't researched yourself (this is a really, really **bad idea** → (<https://arstechnica.com/tech-policy/2023/06/lawyers-have-real-bad-day-in-court-after-citing-fake-cases-made-up-by-chatgpt/>.)
- Generate other content unless expressly permitted and following provided guidance (just ask if you have ideas here)
- Otherwise use or present generative AI content as your own work, when really it is not

If you have any questions about what's acceptable and what's not, you should talk to me before using these tools - not afterwards when my options for helping you will be much more limited.

It is also important that you recognize that large language models frequently provide users with incorrect information, create professional-looking citations that are not real, generate contradictory statements, incorporate copyrighted material without appropriate attribution, and can sometimes integrate biased concepts. Code generation models may produce inaccurate outputs. Image generation models may create misleading or offensive content.

Finally, it is important to note that you understand **you are ultimately responsible for the content that you submit**. Work that is inaccurate, biased, unethical, offensive, plagiarized, or incorrect will be penalized.

**Accommodations for students with disabilities:** If you have a disability and have an accommodations letter from the Disability Resources office, I encourage you to discuss your accommodations and needs with me as early in the semester as possible. I will work with you to ensure that accommodations are provided as appropriate. If you suspect that you may have a disability and would benefit from accommodations but are not yet registered with the Office of Disability Resources, I encourage you to contact them at [access@andrew.cmu.edu](mailto:access@andrew.cmu.edu) (<mailto:access@andrew.cmu.edu>).

**Statement on student wellness:** As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. CMU services are available, and treatment does work. You can learn more about confidential mental health services available on campus at: <http://www.cmu.edu/counseling/> (<http://www.cmu.edu/counseling/>). Support is always available (24/7) from Counseling and Psychological Services: 412-268-2922.

**Laptops Mobile Devices:** In general this is a course that uses a lot of technology, so it's expected that on most days you'll have your laptop and phone with you. With that said, it's your responsibility to be respectful when using these devices. Keep your phone on silent, don't talk on the phone while in class, don't distract others by viewing content on your laptop not relevant to the course, and no technical devices are allowed for any quizzes or tests administered through this course unless explicitly stated by the professor.

## Diversity, Equity and Inclusion

**We must treat every individual with respect.** We are diverse in many ways, and this diversity is fundamental to building and maintaining an equitable and inclusive campus community. Diversity can refer to multiple ways that we identify ourselves, including but not limited to race, color, national origin, language, sex, disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information. Each of these diverse identities, along with many others not mentioned here, shape the perspectives our students, faculty, and staff bring to our campus.


Each of us is responsible for creating a safer, more inclusive environment. Unfortunately, incidents of bias or discrimination do occur, whether intentional or unintentional. They contribute to creating an unwelcoming environment for individuals and groups at the university. If you experience or observe unfair or hostile treatment, you can take advantage of the following resources:


- **Center for Student Diversity and Inclusion:** [csdi@andrew.cmu.edu](mailto:csdi@andrew.cmu.edu) (<mailto:csdi@andrew.cmu.edu>), (412) 268-2150
- **Report-It** (<http://www.reportit.net/>) **online anonymous reporting platform:** [reportit.net](http://www.reportit.net/) (<http://www.reportit.net/>) username: *tartans* password: *plaid*



All reports will be documented and deliberated to determine if there should be any following actions.

## Additional Support

The **Student Academic Success Center (SASC)** (<https://www.cmu.edu/student-success/>) provides a number of resources to help students learn better. You can find the center's **free workshops here** (<https://www.cmu.edu/student-success/programs/workshops/index.html>). Below are some additional resources that may be helpful to students in this course (descriptions below are from SASC):

- **Academic Coaching** (<https://www.cmu.edu/student-success/programs/coaching.html>) --This program provides holistic, one-on-one peer support and group workshops to help undergraduate and graduate students implement habits for success. Academic Coaching assists students with time management, productive learning and study habits, organization, stress management, and other skills. Request an initial consultation [here](#)  ([https://docs.google.com/forms/d/e/1FAIpQLSfMANCWkyPdXRb0zOsMar7nzpUau8hqN\\_gIFm3OISY5QMWwyw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSfMANCWkyPdXRb0zOsMar7nzpUau8hqN_gIFm3OISY5QMWwyw/viewform)).
- **Communication Support** (<https://www.cmu.edu/student-success/programs/communication-support/index.html>) --Communication Support offers free one-on-one communication consulting as well as group workshops to support strong written, oral, and visual communication in texts including IMRaD and thesis-driven essays, data-driven reports, oral presentations, posters and visual design, advanced research, application materials, grant proposals, business and public policy documents, data visualisation, and team projects. Appointments are available to undergraduate and graduate students from any discipline at CMU. Schedule an **appointment** (<https://www.cmu.edu/student-success/programs/communication-support/make-an->

[appointment.html](#) (in-person or video), attend a [workshop \(https://www.cmu.edu/student-success/calendar.html\)](https://www.cmu.edu/student-success/calendar.html), or consult [handouts or videos \(https://www.cmu.edu/student-success/other-resources/index.html\)](https://www.cmu.edu/student-success/other-resources/index.html) to strengthen communication skills. Specific [resources](https://docs.google.com/document/d/1_0K64z6Auu_bse6wmst5xamYbnrk9Ymd2QgMUKCIZSo/edit?usp=sharing)   [\(https://docs.google.com/document/d/1\\_0K64z6Auu\\_bse6wmst5xamYbnrk9Ymd2QgMUKCIZSo/edit?usp=sharing\)](https://docs.google.com/document/d/1_0K64z6Auu_bse6wmst5xamYbnrk9Ymd2QgMUKCIZSo/edit?usp=sharing) for multilingual students are also available.

- [Language and Cross-Cultural Support \(https://www.cmu.edu/student-success/programs/language-support/index.html\)](https://www.cmu.edu/student-success/programs/language-support/index.html) --This program supports students seeking help with language and cross-cultural skills for academic and professional success through individual and group sessions. Students can get assistance with writing academic emails, learning expectations and strategies for clear academic writing, pronunciation, grammar, fluency, and more. [Make an](https://docs.google.com/forms/d/e/1FAIpQLSfMANCWkyPdXRb0zOsMar7nzpUau8hqN_gIFm3OISY5QMWwyw/viewform)   [\(https://docs.google.com/forms/d/e/1FAIpQLSfMANCWkyPdXRb0zOsMar7nzpUau8hqN\\_gIFm3OISY5QMWwyw/viewform\)](https://docs.google.com/forms/d/e/1FAIpQLSfMANCWkyPdXRb0zOsMar7nzpUau8hqN_gIFm3OISY5QMWwyw/viewform) [appointment](https://docs.google.com/forms/d/e/1FAIpQLSfMANCWkyPdXRb0zOsMar7nzpUau8hqN_gIFm3OISY5QMWwyw/viewform)   [\(https://docs.google.com/forms/d/e/1FAIpQLSfMANCWkyPdXRb0zOsMar7nzpUau8hqN\\_gIFm3OISY5QMWwyw/viewform\)](https://docs.google.com/forms/d/e/1FAIpQLSfMANCWkyPdXRb0zOsMar7nzpUau8hqN_gIFm3OISY5QMWwyw/viewform) with a Language Development Specialist to get individualized coaching.

## Class Recordings

This class may be recorded for asynchronous access and / or remote viewing of course lectures and activities. Recordings of course sessions are provided solely for educational use by students enrolled in the course and may not be distributed to any other person or posted on the internet without the express written permission of the course instructor. No student may record any classroom activity without express written consent from the instructor. If you have (or think you may have) a disability such that you need to record or tape classroom activities, you should contact the Office of Disability Resources to request an appropriate accommodation.

## Course Recordings for Synchronous Classes\*

*\* Note: This section generally only applies if the course is being taught remotely. If the course is being taught in-person, lectures may not be recorded or posted to Canvas. For this reason it's important to attend all in-person lectures.*

Unless otherwise stated, synchronous classes taught remotely will be recorded via Zoom so that students in this course (and only students in this course) can watch or re-watch past class sessions. Please note that breakout rooms will not be recorded. I will make the recordings available on Canvas as soon as possible after each class session (usually within 3 hours of the class meeting). Recordings will live in our Canvas website. Please note that you are not allowed to share or repost these recordings. This is to protect your FERPA rights and those of your fellow students.

## COVID-19 Considerations

Please see the [university's minimum requirements](https://www.cmu.edu/coronavirus/preparing-campus/min-requirements.html)  [\(https://www.cmu.edu/coronavirus/preparing-campus/min-requirements.html\)](https://www.cmu.edu/coronavirus/preparing-campus/min-requirements.html) for policies and guidance related to displaying COVID-19 symptoms.

If you display symptoms or have been diagnosed, the current guidance is that you must stay home. You can contact me at your earliest convenience to make alternate arrangements.

Other things you are welcome to do to help protect yourself and others include:

- entering and exiting the classroom while maintaining appropriate physical distancing,
- wearing a facial covering throughout class,
- sitting in the seats with appropriate spacing (and not moving furniture),
- following good social distancing practices at all times,
- using the sanitizing wipes available in the classroom to wipe surfaces (e.g., your desk, tablet arm) upon entry and exit.