Course Syllabus

HCDE 511: Information Visualization

- Day and Time: Wednesdays, 6:00 pm - 9:50 pm, **Denny Hall 303** (https://www.washington.edu/classroom/DEN+303)

Class Slack

https://join.slack.com/t/hcde511winter2025/shared_invite/zt-2x8kbudrn-fiqbdYc0pg8kWQfXmud0CA (https://join.slack.com/t/hcde511winter2025/shared_invite/zt-2x8kbudrn-fiqbdYc0pg8kWQfXmud0CA)

Class Canvas Site

The class Canvas site will be your main stop for the most up-to-date information on the course schedule, assignment descriptions, and links to important resources. Canvas site is located at: **https://canvas.uw.edu/courses/1719550** (https://canvas.uw.edu/courses/1786574/)

Instruction

The class will be instructed by **Douglas Pyle** (mailto:dougdoug@uw.edu), and Teaching Assistant **Adam Hyland** (mailto:achyland@uw.edu)

Course Overview

This course is a masters-level class on Information Visualization. Over the course of the semester, we will learn to critique and create data visualizations, to understand what makes for an effective visualization, and to take a human-centered view on data visualization. We will use visualization to solve problems and answer questions, and will conclude with a group project that will create a visualization that explores interesting and important data.

Learning Objectives

On successful completion of the course, you should be able to:

1. Given a visualization, interpret and critically discuss its applicability to a context and audience.
2. Given a dataset, be able to clean the data into a form appropriate for visual analysis, choose appropriate questions to ask of the data, and carry out an exploratory data visualization process over it.
3. Select useful visual mappings and color palettes, and be able to describe the tradeoffs of different choices for different mappings.
4. Create an interactive visualization for purposes of storytelling, presentation, or analysis.

Books and Materials

There is no specific textbook. Weekly readings will be selected from Steven Few's *Now You See It*, Edward Tufte's *Visual Display of Quantitative Information*, Tamara Munzner's *Visualization Analysis & Design* **(also available as an ebook at the library!)** (https://alliance-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=CP51231394110001451&context=L&vid=UW&lang=en_US&search_scope=all&adaptor=Local%20Search%20Engine&tab=default_tab&query=any,contains,vi
, research papers, and other texts. All readings will be provided on the Canvas site; the underlying books are available through the UW libraries.

Communications: Slack

You should have already been invited to **our class Slack channel** (https://hcde-department.slack.com/archives/C06RN9JRJ1F) for efficient communication with the instructor or TA, and the sharing of announcements and resources, and group coordination of project work. This form of communication is optional but is provided for quicker access to the instructors and as a place to communicate with project teams. All important announcements for class will also be communicated through Canvas and/or email. Please note that Slack is not FERPA compliant, so please do not use Slack for communications around grades or personal issues. Emailing the instructors is the best way to raise those particular issues.

Please note: this is a fast-paced class

- There will be up to three hours of interactive, in-class work per week
- There will be mini-lectures and assignments outside of class

Virtual TA office hours

- by appointment: Contact TA via email or Slack

Virtual Lecturer office hours

- by appointment: **Google calendar booking** (https://calendar.app.google/GYZKzj5d1YKY8SG89)

Assessment

Grading for the quarter will be based on:

- 40% main assignments
- 30% final visualization project (group project, multiple deliverables)
- 20% in-class participation & activities
- 10% reading discussions

These are described in more detail on the Modules & Assignments pages.

Class Policies

Respect

If there were only one policy allowed in a course syllabus, we would choose the word respect to represent our goals for a healthy and engaging educational environment. Treating each other respectfully, in the broadest sense and in all ways, is a necessary and probably sufficient condition for a successful experience together. But since we are not limited to one policy, some other, more specific ones, can be stated.

Inclusion

Diversity of students is a resource and strength for this class, and we value people from all backgrounds and different perspectives. Therefore, our classroom environment should be mutually respectful and inclusive for all. The classroom is an environment with no discrimination, where we intend for everyone to be comfortable and at liberty to contribute, debate, and benefit from the entire learning experience. Any suggestions to improve the inclusiveness of class interactions or any concerns are welcomed by your instructor and TA.

Conduct & Academic Honesty

Students are expected to read and adhere to the **Student Conduct Code (https://www.washington.edu/cssc/for-students/student-code-of-conduct/)** .

Late work

For individual assignments, 1 point is deducted for each day the submission of the assignment is late. For group assignments, 2 points per day will be deducted. It is the entire group's responsibility to make sure assignments are submitted on time, so it is in your best interest to rally the team to make the deadline happen.

Permission to Share Your Submitted Work in Future Courses

Unless you notify us otherwise in writing via email, the instructional team assumes that you are willing to allow us to use samples from your work in this course in future instructional settings (e.g., excerpts or examples in presentations). Any work shared would be attributed to you where appropriate unless you specifically request your name to be removed.

Copyright

All of the expressions of ideas in this class that are fixed in any tangible medium such as digital and physical documents are protected by copyright law as embodied in Title 17 of the United States Code. These expressions include the work product of both: (1) your student colleagues (e.g., any assignments published here in the course environment or statements committed to text in a discussion forum); and, (2) your instructors (e.g., the syllabus, assignments, reading lists, and lectures). Within the constraints of fair use; you may download or copy slides, recordings or notes for your personal intellectual use in support of your education as part of your HCDE education. All of these examples are copyrighted expressions, and fair use by you does not include further distribution by any means of copying, performance, or presentation beyond the circle of your student colleagues in this class. If you have any questions regarding whether a use to which you wish to put one of these expressions violates the creator's copyright interests, please feel free to ask the instructor for guidance.

Communications

You are welcome to give the instructional team feedback about the course, to ask a question about an assignment, to share an interesting article or resource, to report that you will be absent from a class/lab, to request additional time for an assignment (because of significant health, personal, or educational matter), or similar communication. Please note the following guidelines:

- Slack or speaking to the instructor or TAs before/after class are the preferred and most reliable methods of contact. For grades or personal matters, you may email the instructor directly.
- As per university policy, please email the instructors using your uw.edu email address for any grading or registration related questions. Casual questions and comments are free to come from a non-uw.edu email address.
- The instructors receive a lot of email from students – if you choose to email, please be sure to mention the course number and give appropriate context for your question (e.g., Missing HCDE 511 this Wednesday).
- Email concerning assignments might not be replied to if sent within 36 hours of an assignment due date.
- Email or Slack messages that are sent on Friday afternoon or over the weekend are not likely to be replied to until Monday or Tuesday of the following week.
- If you do not receive a reply within 2 days, please resend your email or ask about it during class.

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Congratulations for reading this far! If you're reading this, please send an email or Slack to Doug or Adam; we'll put in a small bonus toward your participation grade. Please don't tell your classmates about this easter egg - we want them to discover it on their own!