Syllabus

Harris School of Public Policy   Brooke Fox
University of Chicago   brooke.fox@chicagobooth.edu
PPHA 30562
Location: Keller 0010
Meeting time: Mondays 5:00pm-7:50pm

Fall 2022
Chart Communications: Telling Stories with Data Visualization
PPHA 30562

Background

The proliferation of technology means that unimaginable quantities of data have become valuable assets to both public and private organizations. Without the skills to make and disseminate meaning from these datasets, they don't live up their purported value. In this course, students will learn how to track down unique datasets, fish for insights and communicate those insights visually.

If an image is worth a thousand words, nowhere is it truer than with data visualization. While there is no shortage of complexity in data analysis and visualization, this class will teach students how to focus their charts to communicate big ideas. This class takes a journalistic perspective on chart communications.

Goals of class

While technical construction is important in chart-making, this class will focus on finding important insights within datasets and how to construct data visualizations that transfer that insight from chartmaker to chartreader in seconds. For a chart to be this effective, the creator has to ask and answer a series of questions about what metrics to use, what chart-type to use, how to write their titles, how to scale their axes, whether to use log scales or linear ones, whether to include annotations, color and design and, most importantly, how to tell the story.

The class will focus on giving students the skills they will need in the real world: finding the right datasets, staying up-to-date with new charting technologies, presenting data effectively and communicating to a group.

Teaching assistant:

Kamran Ahmed
kamranahmed@uchicago.edu

Prerequisites

Students should have some familiarity with programs like excel or R and the ability to do basic functions in these programs. No prior data visualization training is necessary.

Schedule
- Classes occur on Mondays from 5pm to 7:50pm in-person
- Students must attend all classes in-person in order to receive full credit for weekly chart discussions. If a student knows they will not be able to attend a class, they should be prepared to take a deduction on that portion of the grade.
- The class will not be recorded and students will not be able to make up for missed classes. All graded assignments are based on presentations in-class.
- Students will need to bring a computer to class to participate in chart-construction.

How we will use class time:

- Discussion: Students will be asked to bring a chart to class each week that is from either a news source or other current event-related source. We will discuss as a group whether the chart is effective in communicating a big idea or not, and what factors could be improved.

- Chart-construction: Students will work in small groups to produce and workshop effective charts.

- Workshopping: Students will gain practice in critiquing and improving data visualizations by giving and receiving feedback from their peers on their work.

Student assignments

Weekly chart discussion- 20%
Original data analysis project - 30%
Final data visualization presentation - 50%

Grading policies and procedures

Students will work individually on graded assignments. Students will be graded on their ability to demonstrate and apply class principles. All graded assignments are based on students' presentations in class and grades will be posted in Canvas.

Important dates

September 26th: No class
October 31st: Original data analysis project due
November 28: Final data visualization presentation

Pass/Fail
Students who wish to take the course pass/fail rather than for a letter grade must use the Harris Pass/Fail request form (https://harris.uchicago.edu/form/pass-fail). Students who take the course pass/fail must attend class meetings and turn in all assignments, achieving marks on assignments that are overall commensurate with at least a C- letter grade.