DESIGN 365 – Information Design – Spring 2018 | Tue + Thu 12–2:50pm
Prof. Karen Cheng | kcheng@uw.edu | Office Hours Thu 3:30–4:30pm, Rm 257 Art Building

		TUE	**THU**
	wk_1	3.27 Course Intro / **Assign Wk1 Info Readings** Lecture: Storytelling with Infographics **Assign Initial Figure Concepts** **Bring two infographics to class on 4/3**	3.29 12-1:30pm Lunch/Visit from Intuit Design 1:30-2:50pm Lecture: Data Graphics 1
	wk_2	4.3 **Online Quiz Due: Wk1 Info Readings** **Bring Infographics to Class and Pin-Up** *12:30pm Visit from WA Rep. Gerry Pollet*	4.5 **Critique: Initial Figure Concepts** Lecture: Data Graphics 2
	wk_3	4.10 **Guns: Diagram Critique 1** Show at least 3 different visuals *Guest Critic Dr. Frederick Rivara* *(please read his publications in advance)*	4.12 **Local Politics: Diagram Critique 1** Show at least 3 different visuals *2-2:50pm, Guns group meets Dr. Ali* *Rowhani-Rahbar and MPH Grad Joey Chuang* *(please read their publications in advance)*
	wk_4	4.17 **Assign Week 4 Readings** *12-1pm Visit from Schema on Data Tools* *1-2pm Local Politics meets Amy Gore (Chief* *of Staff) and Joseph Pena (Communication)* *for Seattle Councilmember Rob Johnson*	4.19 **Guns: Diagram Critique 2** **Local Politics: Diagram Critique 2** Show at least 3 different visuals
	wk_5	4.24 **Guns Progress Meeting w/KC** **Online Quiz Due: Wk4 Info Readings** *1:15pm Local Politics meets Wayne Barnett,* *Director, Seattle Ethics+Elections Cmte*	4.26 **Local Politics Progress Meeting w/KC** Guns meets w/ subject experts (may be outside Art Building)
	wk_6	5.1 **Guns Critique 1** **1st Draft of Vehicle (3 variations)** *Full class critique	5.3 **Local Politics Critique 1** **1st Draft of Vehicle (3 variations)** *Full class critique
	wk_7	5.8 Guns progress meeting w/KC Slide Lecture as needed [In-Class Workday for Local Politics]	5.10 Local Politics progress meeting w/KC Slide Lecture as needed [In-Class Workday for Guns]
	wk_8	5.15 **Guns Critique 2** **2nd Draft of Vehicle (3 variations)** *Full class critique	5.17 **Local Politics Critique 2** **2nd Draft of Vehicle (3 variations)** *Full class critique
	wk_9	5.22 **Guns Critique 3** **3rd Draft of Vehicle (3 variations)** [In-Class Workday for Local Politics]	5.24 **Local Politics Critique 3** **3rd Draft of Vehicle (3 variations)** [In-Class Workday for Guns]
	wk_10	5.29 Workday	5.31 Workday

All work due _at start_ of assigned final exam time: 10:30am-12:20pm Thu Jun 7
No exceptions. Schedule Summer Quarter travel accordingly.

Course Goals

The purpose of this class is to help students develop the skills necessary to research, analyze and present both quantitative and qualitative information in ways that promote greater understanding of a subject. Specifically, students will:

1 Research and assemble a comprehensive set of data/information
2 Transform the research into useful data graphics/information visualizations
3 Organize data graphics, information visualizations and text into an appropriate vehicle
4 Discuss, analyze and evaluate effective and ineffective information design

Expectations

Be in class every day, on time, prepared with your work. Chronic lateness or insufficient preparation is seen as a lack of interest and lack of respect for myself and your colleagues. *Take notes by hand; do not use your laptop or phone during critiques*. Taking notes by hand improves recall and long-term comprehension: www.psychologicalscience.org/news/releases/take-notes-by-hand-for-better-long-term-comprehension.html See also: www.nytimes.com/2017/11/22/business/laptops-not-during-lecture-or-meeting.html

You are expected to remain in class for the entire studio session. If you must miss class (or leave early/arrive late), please notify me via e-mail as soon as possible. *You are responsible for all assignments and information covered in all classes, regardless of your attendance record.*

Grading

Grading is based on:
1 The quality of the final projects—both visual and conceptual;
2 The design process—the extent of exploration and variation completed over the quarter;
3 Class participation—engagement and communication with others during critiques.

3.8–4.0 is given to a student who has exhibited the highest possible performance in all aspects of the course—final projects, the design process and participation are excellent. This student independently seeks out additional information on design and is highly committed/passionate about their work.

3.4–3.7 is given to a student who exhibits superior performance in all aspects of the course—the final projects, design process, and participation are uniformly of high quality. This student has a thorough understanding of all concepts presented, and is motivated to improve and succeed.

2.9–3.3 is given to a student who has good performance in most aspects of the course. This student follows a thorough design process, has good design work, and consistent participation that reflects a clear understanding of almost all concepts being presented.

2.5–2.8 is given to a student who has fair performance in the course. The final work is adequate, with a design process that reflects the minimum effort needed to complete assignments. Participation and motivation are moderate.

0–2.4 is given to a student with poor performance in the course. Projects are incorrectly prepared, incomplete or missing. This student does not understand the majority of concepts presented and rarely participates in class. This student is not prepared for subsequent courses in design.

Point-Level Grading Rubric
TOTAL POSSIBLE PTS: 192 points
After calculation of all point totals, I will apply a grading curve.

100 pts = Grade for Quality of Final Project Overall
        [25 pts for 4 categories: content, visual design, use of medium + uniqueness]

10 pts = Grade for Initial Figure Concepts
10 pts = Grade for Diagram Critique #1
10 pts = Grade for Diagram Critique #2
10 pts = Grade for Vehicle Critique #1
10 pts = Grade for Vehicle Critique #2
10 pts = Grade for Vehicle Critique #3

10 pts = Quiz on Week 1 Readings
10 pts = Quiz on Week 4 Readings

10 pts = Average of your class attendance (each day = one pt; late/early leave = minus .5 pts)
  2 pts = Bringing in two required infographics on Thu 1/11 (1 point each)

up to +5 points if you have been actively engaged during critique—
i.e., providing helpful critical feedback to people within and outside your subject group
(this is subjective judgement on my part, you can ask me at any time how you are doing)

up to -5 points if you have been particularly disengaged during critique—
i.e., taking excessively long classroom breaks, whispering with others, on your phone/laptop, etc.
(this is subjective judgement on my part, you can ask me at any time how you are doing)

Plagiarism
Plagiarism is defined as using in your own work the creations, ideas, words, inventions,
or work of someone else without formally acknowledging them through the use of
quotation marks, footnotes, bibliography, or other reference. Please check with me if you have
questions about what constitutes plagiarism. This guide may also be helpful:
https://depts.washington.edu/pswrite/plag.html.

Instances of plagiarism will be referred to the Vice Provost/Special Asst. to the President for
Student Relations and may lead to disciplinary action.

Access and Accommodations
UW Disability Resources for Students (http://depts.washington.edu/uwdrs) offers resources and
coordinates reasonable accommodations for students with disabilities.

If you have already established accommodations with DRS, please communicate your approved
accommodations to me at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through DRS, but have a temporary or permanent
disability that requires accommodations (this can include but is not limited to; mental health,
attention-related, learning, vision, hearing, physical or health impacts), you are welcome
to contact DRS at 206-543-8924 or uwdrs@uw.edu or disability.uw.edu.

When you contact the DRS office, their staff will work to establish reasonable accommodations
for you through an interactive process between myself, you, and their office.

Suggested Reading
www.amazon.com/gp/registry/wishlist/29BCRSQJKZF2A/

PRACTICAL READING

albertocairo.com

The Truthful Art by Alberto Cairo, 2016*
The Functional Art, by Alberto Cairo, 2012*

www.edwardtufte.com

Envisioning Information by Edward Tufte, 1990*
The Visual Display of Quantitative Information by Edward Tufte, 1983*

Good Charts by Scott Berinato, 2016
Data Design: Visualising Quantities, Locations, Connections by Per Mollerup, 2015
Information Anxiety 2 by Richard Saul Wurman, 2001 (see also *Information Anxiety*, 1989)
Information Design Handbook by Jennifer Visocky O'Grady, 2008
The Design of Everyday Things by Donald Norman, 2002
Interactive Visualization: Insight through Inquiry, Bill Ferster, 2012

Eager Eyes (eagereyes.org), the blog of Robert Kosara
See also his UW Talk: https://vimeo.com/209294413

VIEWING PLEASURE + INSPIRATION

The Best American Infographic Series (see: www.hmhco.com/at-home/featured-shops/
popular-series/best-american-series/ba-infographics)

www.gestalten.com

Data Flow (2008) and *Data Flow 2* (2010), both edited by Robert Klanten
Designing News (2013) by Francesco Franchi
Visual Storytelling (2011) edited by Robert Klanten
Around the World: The Atlas for Today (2013) edited by Andrew Losowsky
A Map of the World (2013) edited by Antonis Antoniou
Mind the Map (2015) edited by Antonis Antoniou

www.taschen.com

Information Graphics edited by Sandra Rendgen, 2012*
Understanding the World edoted by Sandra Rendgen, 2014

www.davidmccandless.com

Information is Beautiful—a.k.a. *The Visual Miscellaneum*, David McCandless, 2009
see also www.informationisbeautifulawards.com

After-Hours Access to the Art Building
For after-hours access to the Art Building, please bring your Husky Card to the Art Advising Office (RM 104, Open M-F, 9am-4pm). Student cards will be swiped, and you will receive an access sticker for your Husky Card. Access is instant after swiping. Access will be removed at the end of the year.

Violence Awareness/Prevention
—Always call 911 if you or others may be in danger.
—Call 206-685-SAFE (7233) to report non-urgent threats of violence and for referrals to UW counseling (www.wash-ington.edu/counseling) and/or safety resources (http://www.washington.edu/safety).
—Don't walk alone. Campus safety guards can walk with you on campus after dark. Call Husky NightWalk @206-685-WALK (9255) or the shuttle/NightRide program: https://facilities.uw.edu/services/tags/Shuttles.
—Stay connected in an emergency with UW Alert by registering your mobile number at www.washington.edu/alert to receive instant notification of campus emergencies via text/voice messaging. For more information, visit the SafeCampus website at www.washington.edu/safecampus.
—Proper student conduct is important for maintaining a healthy environment at UW. Please familiarize yourself with the UW Student Code of Conduct: http://app.leg.wa.gov/WAC/default.aspx?cite=478-120

ASSIGNED TOPICS

For the course project (which will last the duration of the entire Spring quarter), you will create a series of infographics on one of two assigned topics: 1) Guns in the US or 2) Local Politics in Seattle/King County/Washington State.

Students with last names A-J (Kelda Baljon through Michael Ji) are assigned to the guns topic. Students with last names K-Z (Katharein Johnson through Jeremy Viny) are assigned to the local politics topic.

If you want to switch topics, please find another student in the class to switch with you. Once you've found someone, please email me to tell me about the switch (please cc the other person you are switching with to confirm the switch).

MILLENNIAL AUDIENCE

www.pewresearch.org/
fact-tank/2016/05/16/millennials-match-
baby-boomers-as-largest-generation-in-
u-s-electorate-but-will-they-vote

The goal of your narrative is to inform and activate citizens who are normally non-voters—specifically, the Millennial generation (adults ages 20-28 in 2018). The Millennial generation comprises ~31% of the voting-eligible population. In the 2016 presidential election, less than half of all Millennials voted (~46%).

knightfoundation.org/reports/
why-millennials-dont-vote-mayor

www.whovotesformayor.org

Based on research surveys, Millennials do not vote because:
—They do not feel informed enough to vote. They say that they are confused about the candidates/issues, and do not have a trustworthy source of information.
—They do not see how government policies affect their daily lives.
—They are mobile and not attached to the local community where they currently live.
—They do not trust the government or either political party.

www.americanpressinstitute.org/
publications/reports/survey-research/
millennials-news

In research surveys, Millennials said that they would like to receive political information:
—Via smartphones—61% said they get the majority of their political news on Facebook.
—Directly from officials; they want to have access to policy makers on FB and Twitter
—In ways that allow them to share and comment/discuss with peers/others
—In a welcome kit to a new city where they have recently moved.
—At recreational and cultural events that they attend.

DELIVERABLES / VEHICLE

Based on this research, the vehicle for your infographic narrative are either:
—A series of animated infographics (at least 6) that would be seen on Facebook or Twitter, or
—A short (2 minute maximum) infographic video that would be seen on Facebook or Twitter.

For either option, you should select an imaginary author/distributor of the infographics.
I suggest that you select a non-profit, non-partisan group, such as:

National Physicians Alliance (for Gun Violence Prevention)
Doctors for America (Gun Violence Research)
Gun Owners for Responsible Ownership
Americans for Responsible Solutions
League of Women's Voters of Seattle-King County
Seattle Ethics and Election Commission
Ballotpedia (https://ballotpedia.org/Washington_elections,_2018)

CONSIDERATIONS

You may use any and all kinds of animated information graphics, including:
—data visualizations (bar charts, graphics, area/pie charts, scatterplots, etc.)
—illustrations and conceptual diagrams (venn diagrams, flowcharts, etc.)

blog.bufferapp.com/the-ideal-length-
of-everything-online-according-to-science

Note that the typical online reader's attention span is quite short. The "ideal" length of a Medium.com essay is estimated as a 7-minute read. The ideal headline is estimated to be six words/60 characters.

It can be time consuming to gather and make sense of data. Human experts save time, if you schedule/plan in advance (and can get their attention).

Consider e-mailing or meeting with UW research librarians in your subject area to help you find data. www.lib.washington.edu/suzzallo/ research/research/#Get%20Help

Firearm Subject Experts
Professor Frederick P. Rivara, MD, MPH https://depts.washington.edu/ uwgenped/directory/frederickrivara fpr@uw.edu

Professor Ali Rowhani-Rahbar MD, PhD https://epi.washington.edu/ faculty/rowhani-rahbar-ali rowhani@uw.edu

Local Politics Subject Experts
Find out "who represents me" and contact them directly: https://ballotpedia.org/ Who_represents_me%3F

Many local politicians hold informal weekly meetings at coffeeshops, etc.

PART 1: INITIAL RESEARCH

Begin by researching your assigned topic. Both topics are intentionally large so that students can select a specific subtopic to communicate. For example:

Guns in the US
Public Health Models to Reduce Gun Violence* (recommended)
Manufacturing (and Selling) Guns in the US
Gun Laws in the 50 States
Firearms and Suicide

Local Politics in Seattle/King County/Washington State
Any initiative that may be on the Nov 2018 ballot—see: https://ballotpedia.org/ Washington_2018_ballot_measures. For example:
WA $15 Minimum wage by 2025, #1586, 1595
WA Voter Approval Requirement for Tax Increases, #1577, 1578, 1596, 1609, 1617, 1627
WA Communications and Documents of Legislators Available as Public Records #1584, 1592
WA Prohibit Marijuana Cultivation, Processing, and Sales in Residential Zone, #1633

Profile of any official who runs for election/re-election on Nov 2018, including:
Maria Cantwell, US Senator
Jamie Pedersen, WA Senator // Frank Chopp + Nicole Macri (D), WA Representatives

A significant WA state "influencer" listed on Ballotpedia:
https://ballotpedia.org/Influencers_in_Washington

Seattle City Lobbyists, as disclosed here:
http://www2.seattle.gov/ethics/lobbyists/lobbyhome.asp

PART 2: INITIAL FIGURE CONCEPTS

Once you have determined your subtopic, you can begin conceptualizing your animated infographics. Look for:

1) a complex process that you can explain/visualize with a diagram/information graphic, or
2) a set of data that you can visualize to show patterns/trends

For example, you could make:
Headshots/portraits of all Seattle City Lobbyists, organizing by race, gender, issue, etc.
A flowchart that visualizes the steps and processes used in "Safe Streets" (a violence prevention program targeting at-risk youth).

On Thu April 5, prepare to share three or more different ideas for animated infographics. Each animated infographic should be sketched as a storyboard on paper (letter or tabloid) that contains the following information:

—Diagram Title
—Hand-sketch of the animated diagram you plan to make. You may also want to bring a scan/visual of an existing illustration that you are planning to re-draw/improve.
—Source of the data/information

—If numerical, sample of the actual data. For example, if the data is within a multi-page report, extract the tables you plan to use. If the data is a spreadsheet, extract a sample that shows all the variables in the table. Indicate the total number of records (200 entries, etc.)

—One sentence describing the conceptual insight provided by the infographic. What does the visualization tell you—and about whom? Why is the data/information important or interesting to others? Who would be most interested in the data, and why?

You will pin your ideas to the wall for your classmates to respond to. The goal of this critique is to determine which figures are worthwhile to design during the first half of the quarter.
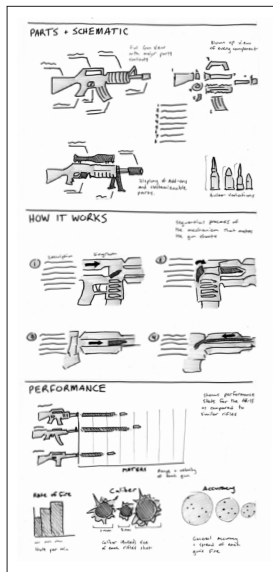
FINAL VEHICLE DESIGN

After our initial infographic critique, you're ready to fully design three of the visualizations that you previously roughed out/sketched. Your goal is to help the viewer understand something—gain insight—by looking at your data/information visualization. **Prepare three different visualizations for critique on Tu/Thu April 10–12.**

You can create any kind of info/data graphic that you think is appropriate, including:

Tables	Area Charts / Pie Charts
Scatter Plots	Bar Charts
3-D/Volume Charts	Line Graphs
Isotype Charts	Timelines
Flowcharts	Radial Diagrams
Visual Taxonomies	Maps/ Illustrative Diagrams

Show the most important keyframe of the diagram in full color on one sheet of 11x17" paper. Do not use letter size paper—it is too small to see during critique—but tiling is acceptable. Please also draw and post a storyboard of the animated infographic on another 11x17" sheet.

Each storyboard should include:
— A descriptive working title for the animated infographic (i.e., "The Seattle City Budget")

— One or two sentences that describe the insight made visible by the data visualization/ infographic. For example, "High-income families eat significantly more fruits and vegetables than low-income families, due to both economic and social factors."

— All axes and data should be directly labelled or identified with a key or legend.

— The visualization should be clear to others with MINIMAL explanation from you.
I will give each student one minute to explain each visualization (3 minutes total).
The class will then provide critique—students should comment on what is
working well (and why) and offer suggestions and rationale for improvement.

Note: We will have a second critique with new sets of data/information the following week, during April 17-19.

Please avoid superficial/trivial diagrams. When students make very simple bar and pie charts during this time period, they typically have to backtrack later. Backtracking is a waste of time! Instead of refining an initial visualization, students have to discard their early (low-quality) work and start over, looking for more and/or better data.

It can be very stressful to fall behind—to know that you are still looking for data while others are finalizing their stories. Please recognize that like many design activities, creating good infographics takes a lot of time. You need time for both the initial research as well as time for the trial and error process of visualization.