DESIGN 478 – Information Design – Winter 2019 | Mon + Wed 8:30–11:20am
Prof. Karen Cheng | kcheng@uw.edu | Office Hours Mon 2pm, Rm 257 Art Building

	MON	WED
wk_1	1.07 Course Intro / Subject Review LATCH exercise / Group Q's **Assign Wk1 Info Readings**	1.09 Lecture: Data Graphics 1 10am—Visit from Urban Freight Lab (URL) KC meets with other groups
wk_2	1.14 8:30am—Visit from KC Housing Dev. 10am—Visit from Graham Pruss KC meets with other groups **Quiz: Wk1 Info Readings Due (12am)**	1.16 9am—Visit from Real Change KC meets with other groups Lecture: Data Graphics 2
wk_3	1.21 MLK Holiday	1.23 **UFL (8:30am)+ Vehicle Residency (10am)** **Critique 1: Three Initial Diagrams** *Full class critique
wk_4	1.28 **HDC (8:30am) + Real Change (10am)** **Critique 1: Three Initial Diagrams** *Full class critique **Assign Week 4 Readings**	1.30 **UFL (8:30am)+ Vehicle Residency (10am)** **Critique 2: Refined/New Diagrams** [In-Class Workday for HCD + Real Change]
wk_5	2.04 **HDC (8:30am) + Real Change (10am)** **Critique 2: Refined/New Diagrams** **Quiz Wk4 Info Readings Due (12am)** UFL + Vehicle Residency meet w/experts (may be outside Art Building)	2.06 **UFL Meeting (8:30am) + Vehicle (10am)** **Small Group Meetings w/KC** HDC + Real Change meet w/ subject experts (may be outside Art Building)
wk_6	2.11 **HDC (8:30am) + Real Change (10am)** **Small Group Meetings w/ KC**	2.13 KC lecture—prep for final vehicles Technical support (outside guests)
wk_7	2.18 President's Day Holiday	2.20 **UFL (8:30am)+ Vehicle Residency (10am)** **Critique 1: Entire Campaign** *Full class critique
wk_8	2.25 **HDC (8:30am) + Real Change (10am)** **Critique 1: Entire Campaign** *Full class critique	2.27 **UFL (8:30am)+ Vehicle Residency (10am)** **Critique 2: Entire Campaign** [In-Class Workday for HCD + Real Change]
wk_9	3.04 **HDC (8:30am) + Real Change (10am)** **Critique 2: Entire Campaign** [In-Class Workday for UFL + Vehicle]	3.06 KC lecture—prep for final refinement
wk_10	3.11 Workday	3.13 Workday

All work due *at start* of assigned final exam time: 8:30am-10:20pm Tue Mar 19
No exceptions. Schedule Spring Break 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.

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.

After-Hours Access to the Art Building
For after-hours access to the Art Building, please review this information on the SOAAHD website: https://art.washington.edu/building-policies

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.washington.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

Suggested Software

A spreadsheet program—like MS Excel or Apple Numbers
Note that MS Office is free for UW students:
itconnect.uw.edu/wares/uware/microsoft/microsoft-software-for-students/

If you don't know Excel, I you can attend this free UW workshop held Tue Jan 8 at 3:45pm in OGL: https://itconnect.uw.edu/learn/workshops/

You also need a data viz program—you can use Illustrator's graph tool, but it's clunky:
helpx.adobe.com/illustrator/using/graphs.html

UW students have free access to Tableau public, see: itconnect.uw.edu/work/data/use-data/visualization-menu/tableau-data-visualization

I personally use RAW: https://rawgraphs.io/
and Google charts: https://support.google.com/docs/answer/63824

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 (www.goodreads.com/series/124310-the-best-american-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

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

Malofiej Infographic Competition and Annuals
http://www.malofiejgraphics.com/

For the course project (which will last the duration of the entire Winter quarter), you will create infographics/data graphics for an assigned organization/topic.

Based on your response to the class survey (thank you!) I have assigned everyone to one of the topics/organizations as shown below. ***If you want to switch topics, please find another student 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).***

HOUSING DEVELOPMENT CONSORTIUM (HDC)

www.housingconsortium.org

You may work individually or in pairs. Let me know if you are pairing up.
Jacob Etalamaki
Jett Tucker
Caitlin Murphy
Piper Wysaske
Katherine Taylor
Cody Scott

Leah Haberman, Outreach and Communications Manager
leah@housingconsortium.org

HDC is a group of ~170 members who work together to provide affordable housing and end homelessness in King County. Members include government agencies, non-profit organizations and businesses.

HDC advocates for policies that they believe will lead to positive housing outcomes. They share their ideas and point of view via e-newsletters, research reports, editorials and social media (Facebook and Twitter) to influence both the general public and policy makers.

HDC has an existing series of infographics created by non-designers at Seattle University. Besides using the infographics in their own communications, they distribute them to their members—to educate them, and in the hope they will be shared further.

For our class, HDC has asked if we can help them make infographics that explain three topics: Community Development, Housing+ Mental Health, and Transit-Orientated Development. Please read material on Canvas in Files > ResearchResources > HDC.

For the final deliverables, the HDC infographics can be a series of one-page, letter-size, infographic PDFs—or a series of social media cards—or a short (less than 2 min) video or infographic animation.

The final audience for these infographics is the general public in Seattle and King County—especially people who are concerned/active about affordable housing and homelessness.

Leah Haberman, Outreach and Communications Manager for HDC (and recent UW graduate) will visit our class next week, on Monday. As a group, please develop a list of questions to ask her—and email it her (please cc me) by the end of the day this Wednesday.

REAL CHANGE

www.realchangenews.org

You may work individually or in pairs. Let me know if you are pairing up.
Justin McKissisk
Alyssa Chow
Andrew Le
JJ Hatheway
Chloe Corriveau

Katie Comboy, Volunteer and Community Resource Coordinator
katiec@realchangenews.org

Real Change is a weekly alternative newspaper focused on issues that impact poor and homeless people in Seattle/King County. Vendors purchase the newspaper for 60 cents, and resell it for $2, keeping the profits. Vendors may also write for the newspaper (under the guidance of the editors). *Real Change* also engages in related advocacy efforts. Please review their website and material on Canvas > Files > ResearchResources >RealChange.

For our class, *Real Change* has asked if we can help them design a printed insert that explains how their organization works. They have an existing general brochure, but they feel it is outdated. Additionally, they want infographics that they can share on social media (Facebook, Twitter and Instagram)—either static or animated—that explain their organization and garner community support.

Real Change has an overarching goal to increase both website traffic and the number of print readers (see their strategic plan: http://main.realchangenews.org/about/work#plan). Therefore, these infographics (and the brochure) are targeted toward getting new readers and new supporters/donors—people who are not now familiar with *Real Change*.

Katie Comboy, Volunteer and Community Resource Coordinator for *Real Change* will visit our class next week . As a group, please develop a list of questions to ask her —and email to her (please cc me) by the end of the day this Wednesday.

VEHICLE RESIDENCY

https://www.seattle.gov/council/meet-the-council/mike-obrien/aiding-people-living-in-vehicles

You may work individually or in pairs:
Joylyn Yang
Maverick Garces
Matthew Farmer
Selina Nguyen
Jamillia Lopez
Grant Muma

Graham Pruss, PhD Candidate
grahampruss@gmail.com

Graham Pruss is a UW PhD candidate in Anthropology who studies vehicle residency and homelessness (see anthropology.washington.edu/people/graham-pruss).He has amassed a substantial set of data that could be visualized so that policymakers and the general public could better understand how to help and support people who live in their cars due to homelessness.

As background, please read materials on Canvas > Files > ResearchResources > Vehicle Residency) and this website: www.seattleu.edu/artsci/departments/ips/community-projects/seattle-vehicle-residency-research-program

For our class, Graham has asked if we can design a map that shows where overnight parking is prohibited. The map could be print or digital. This visualization could help vehicle residents find places to park without getting a ticket. It could also help policymakers and the general public see where vehicles have been 'banished.'

Additionally, Graham believes that a brochure explaining "How to Live in Your Car Without Getting a Ticket" and "How to Deal with Scofflaw Tickets" could be a useful resource.

Graham will visit our class next week on Monday . As a group, please develop a list of questions to ask him—and email it to him (please cc me) by the end of the day this Wednesday.

URBAN FREIGHT LAB (UFL)

https://depts.washington.edu/sctlctr/urban-freight-lab-0

TEAM 1
Rachel Connelly
Raisa Janjua
Tallon Cote

TEAM 2
Faezah Shaharuddin
Alex Britton
Yomna Hawas

Gabriela Giron, Research Assistant
(and Civil Eng. PhD Candidate)
gabgv13@uw.edu

Seattle is the fourth-most congested city in the United States. The UW Urban Freight Lab brings researchers together with retailers, truck freight carriers, parcel companies, technology companies, building developers/operators and the City of Seattle DOT to try and improve the operation of urban goods delivery to alleviate traffic problems.

For our class, UFL has asked if we could help them visualize data they are collecting as part of their 'Final 50 Feet' research project (see: depts.washington.edu/sctlctr/urban-freight-lab/final-50-feet-research)

Specifically, UFL has been counting the number of cars and trucks that enter and exit Seattle's Center City from video footage taken from 41 selected gateways. At this point, they have one gateway coded—over two days (Tue and Wed) and 24 hours each day.

For our class, UFL has asked us to visualize and find patterns in this data. They want to capture the ebb and flow of commercial, transit and passenger vehicles into Seattle. Their typology of vehicles is extensive—please review the PDF on Canvas > Files > ResearchResources > UrbanFreightLab.

The final deliverable could be print-based and/or animated, as long as it communicates:
—How the routes to Center City are used by different commercial vehicles types
—Commercial vehicle volume entering and exiting Center City at different times of day
—Estimation and comparison of inbound and outbound commercial vehicle flow

Ideally, this information will guide development for a future Seattle truck model that will enable SDOT to properly plan for the future.

Gaby Giron, UFL Research Assistant (and Civil Engineering PhD candidate) will visit our class this Wednesday. As a group, please develop a list of questions to ask her ASAP, and email it to her (please cc me).