

LAS 6292: DATA VISUALIZATION

updated: 2021-05-21

Pre-Class Preparation (Instructor):

Send in an email to students:

- content of any pre-class emails.

Bring to Class:

- Snacks
- Flip charts and markers
- Dry write markers
- Tent cards for student names

Objectives and Competencies:

-

Pre-class Preparation (Students):

Readings

1. “Ch7 in Exploratory Data Analysis” in Wickham and Grolemund’s “R for Data Science”:
2. Rougier NP, Droettboom M, Bourne PE (2014) Ten Simple Rules for Better Figures. PLoS Comput Biol 10(9): e1003833. [read online](#)

Original Readings for this week:

1. Alexander, S.M., Jones, K., Bennett, N.J. et al. Qualitative data sharing and synthesis for sustainability science. Nat Sustain 3, 81–88 (2020).
[\[read online\]](#) [\[download pdf\]](#)
2. Renaut, S. et al. 2018. Management, Archiving, and Sharing for Biologists and the Role of Research Institutions in the Technology-Oriented Age. *BioScience* 68(6)400–411
[\[read online\]](#) [\[download pdf\]](#)
3. Duke, Clifford S., and John H. Porter. 2013. “The ethics of data sharing and reuse in biology.” *BioScience* 63(6): 483-489.
[\[read online\]](#) [\[download pdf\]](#)

4. Tenopir, C., et al. (2015). Changes in data sharing and data reuse practices and perceptions among scientists worldwide. PloS one, 10(8), e0134826.
[\[read online\]](#) [\[download pdf\]](#)
5. Mauthner, NS, & O. Parry O. 2009. Qualitative data preservation and sharing in the social sciences: On whose philosophical terms?. Australian J of Social Issues 44(3):291-307.
[\[read online\]](#) [\[download pdf\]](#)

Online Lectures:

1. Tommy McCall: [The simple genius of a good graphic](#)
2. R. Luke DuBois: [Insightful human portraits made from data](#)
3. Mike Chapple: [Data Visualization in R with ggplot2](#). Watch the “Introducing ggplot2” (4:43) and “Grammar of Graphics” (4:54)

Class Outline

<https://datacarpentry.org/R-ecology-lesson/04-visualization-ggplot2.html> for lecture https://www.yan-holtz.com/PDF/Dataviz_Caveats.pdf