

## Advanced Data Visualization – Tentative Schedule\*

\*Subject to change.

**Mon Jan 30:** Introduction to the Course, Icebreakers. Why Learn about Data Visualization?

Pre-class Reading: None

**Wed Feb 1:** Tools Intro: GIMP, *R* & RStudio, & ParaView

Pre-class reading: Complete Data Carpentry *R* tutorial Section “Before We Start”  
(<https://datacarpentry.org/R-ecology-lesson/00-before-we-start.html>)

**Mon Feb 6:** Basics of Data Visualization

Pre-class Reading: Ware Ch. 1

**Wed Feb 8:** The Eye

Pre-class Reading: Ware Ch. 2

**Mon Feb 13:** Luminance, Brightness, & Contrast

Pre-class Reading: Ware Ch. 3

**Wed Feb 15:** Color

Pre-class Reading:

1. Ware Ch. 4 (pp. 95–117)
2. The Getty’s Bauhaus Exhibit on Form and Color:  
[https://www.getty.edu/research/exhibitions\\_events/exhibitions/bauhaus/new\\_artist/form\\_color/](https://www.getty.edu/research/exhibitions_events/exhibitions/bauhaus/new_artist/form_color/)

**Mon Feb 20:** Uses of Color in Graphing & Plotting with ggplot2

Pre-class Reading:

1. Ware Ch. 4 (pp. 117–138)
2. Wickham 2010

**Wed Feb 22:** Finding Information

Pre-class Reading: Ware Ch. 5

**Mon Feb 27:** The Good, The Bad, and The Ugly

Pre-class Reading: Wilke Ch. 1–5, 17–25

**Wed Mar 1:** Student Presentations: 2D Graphs (Online, no class meeting)

Pre-class Reading: Wilke Assigned Chapter

**Mon Mar 6:** Visualization Challenge # 1

Pre-class Reading: None

**Wed Mar 8:** Using Motion

Pre-class Reading: Ware Ch.6

**Mon Mar 13:** Critique and Revisions of Challenge #1

Pre-class Reading: none

**Wed Mar 15:** Space Perception

Pre-class Reading: Ware Ch. 7

**Mon Mar 20:** Spring Break (Mar. 22, no class)

**Wed Mar 22:** Spring Break (no class)

**Mon Mar 27:** Final Project discussion / 3D Plotting in R

Pre-class Reading: have a 2-3 minute “elevator pitch” on your research or idea for final project.  
Does not need to be complete, we can also discuss and help brainstorm.

**Wed Mar 29:** Using Paraview for 3D Objects

Pre-class Reading: None

**Mon Apr 3:** Visual and Data Objects

Pre-class Reading: Ware Ch. 8

**Wed Apr 5:** Cognition in Visualization

Pre-class Reading: Ware Ch. 11

**Mon Apr 10:** Building a Visual Narrative

Pre-class Reading: Ware Ch. 9

**Wed Apr 12:** Visualization Challenge # 2

Pre-class Reading: None

**Mon Apr 17:** Individual meetings regarding final project progress (no class meeting)

Pre-class Reading: None

**Wed Apr 19:** Critique and Revisions of Challenge #2

Pre-class Reading: None

**Mon Apr 24:** Build an Assessment Tool for Visualizations

Pre-class Reading: Ware Appendix C

**Wed Apr 26:** In-class critiques

Pre-class Reading: None

**Mon May 1:** In-class critiques

Pre-class Reading: None

**Wed May 3:** In-class critiques

Pre-class Reading: None

**Mon May 8:** In-class critiques

Pre-class Reading: None

**Wed May 10:** In-class critiques

Pre-class Reading: None

**Final Exam: Slide-show Presentations (Friday May 21 8:00 – 10:30 am)**