# 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/

**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:** Student Group Presentations: 2D Graphs
Pre-class Reading: Wilke Assigned Chapter

**Wed Mar 1:** The Good, The Bad, and The Ugly
Pre-class Reading: Wilke Ch. 1–5, 17–25

**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
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:**   3D Plotting in R
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
<span style="color:red">Pre-class Reading: None</span>

**Wed May 3:**   In-class critiques
<span style="color:red">Pre-class Reading: None</span>


**Mon May 8:**   In-class critiques
<span style="color:red">Pre-class Reading: None</span>

**Wed May 10:**   In-class critiques
<span style="color:red">Pre-class Reading: None</span>


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