CMSE 402, Spring 2018
Tentative course calendar[1]

Mon. 1/8 (Day 1) - Intro to course; get to know each other; expectations and plans; viz discussion

Wed 1/10 (Day 2) - Data and image models - breakdown of plot components (using Wickham and Tufte)

Mon 1/15 - Martin Luther King Day, **no class**

Wed 1/17 - O'Shea out of town, **no class**

Mon 1/22 (Day 3) - Visualization design; effective communication of information; (using Tufte)

Wed 1/24 (Day 4) - Software ecosystem around visualization; File formats and data models.

Mon 1/29 (Day 5) - Types of visualizations/visualization taxonomy. Statistical visualization (visualizing distributions)

Wed 1/31 (Day 6) - Data manipulation: binning, filtering, smoothing, histograms

Mon 2/5 (Day 7) - Time series datasets

Wed 2/7 (Day 8) - Animation in visualizations

Mon 2/12 (Day 9) - Reporting/Q&A on visualization interviews (from HW assignment)

Wed 2/14 (Day 10) - Human perception and effects on visualization

Mon 2/19 (Day 11) - High-dimensional datasets

Wed 2/21 (Day 12) - Immersive visualization (virtual reality / planetarium) - field trip!

Mon 2/26 (Day 13) - Uncertainty and missing data

Wed 2/28 (middle of semester) (Day 14) - Project proposal and peer review

[1] This is my best guess at the schedule prior to the start of the semester. The overall content shouldn't change, but ordering or deadlines may shift somewhat. If deadlines change, substantial notice will be given!

Mon 3/5 - spring break, **no class**

Wed 3/7 - spring break, **no class**

Mon 3/12 (Day 15) - Images: color theory, color maps, and image visualization

Wed 3/14 (Day 16) - Geospatial visualization

Mon 3/19 (Day 17) - Narratives in visualization

Wed 3/21 (Day 18) - Trees and hierarchical data

Mon 3/26 (Day 19) - Network/graph visualization

Wed 3/28 (Day 20) - Interactive visualization, I

Mon 4/2 (Day 21) - Interactive visualization, II

Wed 4/4 (Day 22) - Data manipulation / synthesizing multiple datasets

Mon 4/9 (Day 23) - Volumetric visualization (volume rendering, isosurfaces, flows)

Wed 4/11 (Day 24) - 3D visualization / using space effectively

Mon 4/16 (Day 25) - Visualizing large datasets, I

Wed 4/18 (Day 26) - Visualizing large datasets, II

Mon 4/23 (Day 27) - Final presentations, I

Wed 4/25 - last day of class - (Day 28) - Final presentations, II

Final exam: Thursday 5/3, 7:45-9:45 a.m. in 1220 Engineering Building. Final presentation overflow.