Welcome

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Welcome

In this class you will learn about data visualization. You will learn about best practices for making effective visualizations from data using modern software.

In this class you will also be introduced to some of the modern visualization software tools.

A grammer for data graphics

Aesthetics

- Scale
- Guides/Legends
- Facets
- Layers
- Animation

Data graphics in R

ggplot

Univariate

- scatterplots, smoothers, boxplots, histograms, density plots, bar graphs, clustered bar graphs, stacked bar graphs, pie charts, time plots

Multivariate

- multiple smoothers, facets, mosaic plot, maps, choloropeth maps, networks

ggplot website

Take a look at the ggplot2 website.

Be sure to download the ggplot2 Cheatsheet.

Here is the link to the ggplot2 extensions website.

Interactive data graphics

Web rich content has brought more color and motion to data visualization.

- shiny
- seasonalview
- htmlwidgets
- dygraph
- D3
- plotly
- Tableau
- Qlik
- Omni-Sci

Spatial data

Working with geolocation data and maps

- ggmap Now requires an API and credit card number.
- leaflet

Distances and routes

Network science

Graphs in visualizations.