NIH Library Class Proposal: Introduction to Data Visualization in R: ggplot

# Description

This is the first class in a four-part series on data visualization in R. A basic understanding of R is expected. This one-hour class provides a basic overview using ggplot, which is a part of the tidyverse. The tidyverse is a [collection of R packages](https://www.tidyverse.org/packages) designed for data science. Students are encouraged to install [R](https://mirrors.nics.utk.edu/cran/) and [RStudio](https://www.rstudio.com/products/rstudio/download/#download) before the webinar so that they can follow along with the instructor. Attendees will need to download the class data before the webinar.

Upon completion of this class, students should be able to:

* Identify the appropriate packages for plotting data when using the tidyverse
* Understand the basics of plotting in ggplot
* Identify the general structure of ggplot code that is used to plot figures
* Distinguish between individual and collective ggplot geoms
* Define ggplot aesthetics
* Demonstrate how to add a layer to a plot using ggplot
* Add a geometric function to a plot
* Modify a basic ggplot plot

Project teaching date: Week of Nov 14