**Mar - Apr Workshops from the HS Library and Research Computing**

Join us for basic and advanced sessions on R, the popular programming language for statistical computing and graphics. Our core R workshops are welcome to all, whether your learning R for the first time or would like a refresher. Workshops are via Zoom and are free: use the links below to register.

**R Workshops**

**Introduction to R** The Mar 16 1:00PM - 3:00PM [Register](https://cal.hsl.virginia.edu/event/10383546)

This workshop is directed towards participants who have little or no experience with statistical computing or programming. R is an open source language that can be used for a variety of computational purposes. This class will introduce R and RStudio in the context of its data analysis capabilities. Via interactive code-alongs, students will learn the basics of creating variables, using functions, accessing documentation, loading packages, importing data, and investigating a dataset.

**Data Preparation in R** Thu Mar 23 1:00PM - 3:00PM [Register](https://cal.hsl.virginia.edu/event/10383548)

Data analysis involves a large amount of preparing, cleaning, and "munging" data to facilitate downstream data analysis. This workshop is designed for those with a basic familiarity with R who want to learn modern tools and techniques for data manipulation. Upon completing this lesson, participants will be able to use the dplyr package in R to effectively manipulate and conditionally compute summary statistics over subsets of a "big" dataset containing many observations.

**Data Visualization in R** Thu Mar 30 1:00PM - 3:00PM [Register](https://cal.hsl.virginia.edu/event/10383551)

This workshop will cover fundamental concepts for creating effective data visualization using the popular R plotting package, ggplot2. We will review fundamental concepts for visually displaying quantitative information, such as using series of small multiples, avoiding "chart-junk," and maximizing the data-ink ratio. We will cover the grammar of graphics in the ggplot2 package (geoms, aesthetics, stats, and faceting) to create beautiful plots layer-by-layer. Upon completing this lesson, learners will be able to use ggplot2 to explore high-dimensional datasets.

**Data Wrangling in R**Thu Apr 6 1:00PM - 3:00PM [Register](https://cal.hsl.virginia.edu/event/10383555)

One of the most difficult tasks when conducting data analysis is combining disparate datasets into a single usable dataset. This workshop will provide participants with data cleaning and joining skills using functions from tidyverse packages. Specifically, participants will be able to reorganize and reshape datasets, clean messy datasets, and correctly merge datasets together.

**Making R Run Faster on Rivanna** Thu Mar 16 2:00PM - 4:00PM [Register](https://cal.lib.virginia.edu/event/10090557)

Is your R code running too slowly on Rivanna? This workshop will explore some of the simpler techniques to make your R code run more efficiently. Required experience: Intermediate experience with R programming.

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Check out the full workshop calendars from [Health Sciences Library](https://cal.hsl.virginia.edu/calendar/data) and [Research Computing](https://www.rc.virginia.edu/education/workshops/).

Questions? Email the Health Sciences Library Research & Data Services team at hsl-rdas@virginia.edu.