Data Visualisation with ggplot2

Want to learn how to effectively visualise your data in R using the elegant {ggplot2} package? With {ggplot2} it's easy to customise everything from plot layouts and themes to scales, colours, and more! This course will comprehensively take you through basic plot types such as bar and line charts as well as cover more advanced topics such as interactive graphics with {plotly}.

Course Outline

- Introduction to the different graphics packages
- Introduction to the fantastic {ggplot2} package
- Groups, geoms, stats and layers within {ggplot2}
- Scales, axes and legends
- Facets, colour themes and general themes

Learning Outcomes

Session 1:

By the end of session 1 participants will…

- understand the basics of {ggplot2}
- know how to create effective plots with the `ggplot()` function
- understand how to use {ggplot2} aesthetics
- understand how to use `geom_*` functions to create:

    - bar plots
    - heat maps
    - density plots
    - histograms and much more

- be able to facet plots using `facet_*` functions

Session 2:

By the end of session 2 participants will…

- be able to modify the scale of a plot including colour palettes
- be able to use built-in as well as external plot themes
- understand how to manually customise existing theme components
- be familiar with {plotly} and {gganimate}, used for dynamic visualisations

This course does not include:

- The creation of 2D maps using spatial data, see our course on Spatial Data Analysis with R.
- Plotting of time series data, see our course on Time Series Analysis With R
- Data manipulation and data cleaning. For data cleaning and manipulation see our Data Wrangling with Tidyverse course.

Attendee Feedback

- "The instructor was incredibly effective - good communication, and good time management, and well-prepared material! I really liked how the instructor "parked" student questions so as to not get off-topic, and then came back with answers at a more appropriate time! No time wasted setting up software!"
- "Sometimes plotting our data/results is something that we HAVE TO do, but I've just discovered how fun it can be. Rhian was a great teacher and also gave us many external resources to get ideas and improve our skills."
- "Theo was an excellent teacher and the course was very good. Thank you."
- "Mandy was simply incredible. She is very patient, extremely clear and she really gets the questions asked from her, immediately and spot on. I have learned more in these two sessions than in a whole year of shopping around for R syntax online."