

## Data Wrangling in the Tidyverse

If you work with data, you probably spend a lot of time cleaning it and wrangling it into the correct shape. This course will show you how you can use R to efficiently clean and wrangle your data into a format that's ready for analysis. You will learn about the Tidyverse, what tidy data really is, and how to practically achieve it with packages such as {dplyr}, {tidyr}, {lubridate} and {forcats}.



### Course Outline

- What is **tidy data** and the **{tidyverse}**?
- Solving data manipulation challenges with **{dplyr}**
- Dates and times with the **{lubridate}** package
- Creating tidy data with **{tidyr}**
- Dealing with categorical variables using **{forcats}**

### Learning Outcomes

#### Session 1:

*By the end of session 1 participants will ...*

- be familiar with the {dplyr} data wrangling package, and be able to use its main functions.
- be able to combine data based on specific columns using {dplyr} join functions.
- be able to manipulate dates and times in R using {lubridate}.

#### Session 2:

*By the end of session 2 participants will ...*

- be able to transform their data between long and wide data formats using {tidyr}.
- be able to join and separate columns of a dataset.
- be familiar with different methods of dealing with both explicit and implicit missing values.
- understand how to apply the {forcats} package to create and re-level factors in datasets, and also reorder variables in a plot.

*This course does not include:*

- Content from the {stringr} package, which helps with splitting and combining strings, manipulating text data and working with regular expressions. We have a [Text Mining in R](#) course which covers {stringr} in detail.
- The {purrr} package. If you want to learn more about {purrr} see our [Functional Programming with {purrr}](#) course.
- Although {ggplot2} features in this course, we recommend attending our [Data Visualisation with ggplot2](#) course if you want to learn more about creating data visualisations in R.

## Attendee Feedback

- “The instructor was very knowledgeable and the course was really well structured. I enjoyed learning about the Tidyverse!”
- “Theo and Rhian both made the course material fun and easy to understand, they both made you feel like you could ask any question without feeling stupid - and with R I feel like it’s very easy to feel silly asking certain questions, but they completely eliminated all of that worry. They both made you feel excited to learn more, some of the best training I’ve ever had - I was concentrating the whole time and usually I find that I zone out really easily with training”
- “Very friendly/knowledgeable/helpful instructors”