Statistical Consulting Centre

# Introduction to R and Reproducible Research

## Mon 20, Tue 21, Thu 23 and Fri 24, July 2026 - 9am to 12.30pm

**Enrolment form for fee-paying participants**

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| **Title:** | | **Full Name:** | |
| **Employer:** | | | |
| **Department:** | | | |
| **Address:** | | | |
| **Suburb:** | | **Postcode:** | |
| **Email:** | | | |
| **Telephone:** | | **Mobile:** | |

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| **Signature:** | | **Date:** | |

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| **Course fees** | Full | $750 | | |
| With 10% GST | UoM Staff | $550 | | |
| | UoM GR student | $275 | Student ID | |

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| **Internal transfer of funds** | ☐ | Staff $500 | ☐ | UoM Student $250 ☐ |

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| Themis account string | | | | | | | | |
| **Finance person:** | | | **Finance email:** | | | | | |

https://fdmconversion-uat.unimelb.edu.au/fdm-lookup/

| **Workday tags** | *Mandatory | | | | | | |
|---|---|---|---|---|---|---|---|
| *Spend Category | *Company | *Cost Centre | *Fund | *Activity | *Region | Business unit | Project |
| SC_0126 INT Other Expert Services (Expense) | C001 University of Melbourne | 10757 Agriculture, Food and Ecosystem Sciences - Admin | FD_05 Grants & Commercial Contracts | ACT_02 Research | RE_001 Parkville | BU_008 Faculty of Science | PRJ_000000 |

**External billing:**

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| Tax invoice | External party fee includes GST $750 |
| Name/Company | |
| Address | |

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| Pay by Credit card go here: | https://ecommerce.unimelb.edu.au/introduction-to-r-and-reproducible-research |

# Introduction to R and Reproducible Research

*A course of the Statistical Consulting Centre, The University of Melbourne*

Mon 23, Tue 24, Thu 26 and Fri 27, February 2026 - 9am to 12.30pm

Face to Face

This workshop covers the tools needed to efficiently work with data using R, particularly focusing on importing, rearranging, describing and visualising data. This course has a focus on reproducible research, which means making sure that all of steps in analysing your data are recorded and could be run again automatically: by you, if you discover an error in your data file or a step in your data processing; by a colleague, to do a similar analysis on their own data; or by someone else to verify your results. The workshop covers the following topics:

- the basics of R and RStudio;
- using R Markdown to tie together your R code, output and analytical decisions;
- the benefits of a reproducible approach to data analysis;
- concepts relating to types of data and how to best organise the data you collect;
- importing data from commonly used file formats including Excel and CSV;
- practical data-cleaning tasks to get your original data ready for analysis;
- methods for summarising and describing data;
- producing high-quality graphics with the 'ggplot' package;
- presenting results from statistical analyses in tables and graphs.

The workshop focuses on specific aspects of the R statistical package, methods for reproducible research and ways to effectively work with data arising from real-world research. The Statistical Consulting Centre also offers a general, introductory statistics course "Statistics for Research Workers using R" which focusses on statistical concepts and methods. These courses are designed to have relatively little overlap and may be taken in either order.

**Course structure:**

This is a four morning's workshop. Each day will consist of two approximately equal-length sessions; the first session of the day will commence at 9:00 a.m. and the final session will end at approximately 12.30 p.m. The sessions will mix lecture presentations with practical work; tutorial help will be readily available.

The statistical package R will be used in the course, along with companion software including RStudio, R Markdown, ggplot2 and the 'tidyverse' collection of packages. Participants are encouraged to have R and RStudio set up on their personal laptop prior to the course. Desktop PCs will also be available at the venue.

**Venue:**

The course will be held in the Wilson Computer Laboratory in the School of Mathematics and Statistics, Peter Hall Building (160).

**Cost:**

The cost of the workshop is $750 (including GST) for external participants to the university, $500 plus GST for University staff members, or $250 plus GST for University students. (GST does not apply if paying through your university department.)

**Who should take this course?**

The workshop is suitable for researchers wanting efficient and effective strategies for working with quantitative data in a reproducible manner. This course is about what happens before and after traditional statistical analysis: getting your data in a form ready for analysis and presenting the results of statistical analyses. While designed for those who have not used R before, it may also be of interest to participants with some familiarity in R but not R Markdown or the 'tidyverse' family of packages.

**Prerequisites:**

No prior experience with R is necessary.

Most of this workshop assumes little statistical knowledge. However, some statistical concepts will be employed and may be introduced with less detail or rigour than a statistics-focussed course. Background knowledge equivalent to an introductory statistics course will be beneficial but not necessary.

**Course presenters:**

The presenters, Dr Sandy Clarke-Errey and Cameron Patrick, are consultants for the Statistical Consulting Centre in the School of Mathematics & Statistics with over 25 years of experience using R between them, both in research and commercial settings. Cameron worked as a software developer in a data-intensive industry prior to becoming a statistician. Sandy has been a consultant with the Statistical Consulting Centre since 2004, assisting university students and staff with R for a wide range of applications. Both Cameron and Sandy also consult to industry and government.