Intro to R workshop 2021

**Brainstorming session: Jun 28, 2021**

Deadline: 15 Sep 2021

Attendees: 15 people

#modules: Three

- module 1: Intro to R

- module 2: Data Exploration

- module 3: Data Visualisation

duration of sessions: 3 hours/module (2\*1.5h, break = 30 mins)

Datasets to be used: mtcars, iris

**Module 1**

**Introduction to R and R-Studio**

Veronica Urgiles

Contents

* Downloading R and R-Studio
* Getting used to the panels of R-Studio
* Setting working directory
* Vectors and data types
* Dataframes
* Read a csv file (point-and-click and code)
* Subsetting and data massaging
* Base R plotting

**Module 2**

**Data Exploration**

Biplabendu Das

Contents

* Know your data structure
* Clean up the data
* Export clean data as a csv
* Data manipulation using tidyverse
  + Select
  + Filter
  + Mutate
  + Joins
  + group\_by/summarize
  + pivot\_longer/wider
* Save your clean data as .Rds file

**Module 3**

**Data visualisation**

Leo Ohyama and Alicia Formanack

Contents

* Bar plots
* Scatter plots
* Box plots
  + facet\_wrap
  + ggtitle
  + axis labels
  + color\_schemes
  + geom\_vline/hline

Website links (resources)

Alicia to Everyone (11:20 AM)

<http://ucanalytics.com/blogs/learn-r-12-books-and-online-resources/>

Leo Ohyama to Everyone (11:21 AM)

<https://datacarpentry.org/semester-biology/schedule/>

Vero Urgiles to Everyone (11:24 AM)

<https://ecorepsci.github.io/reproducible-science/index.html#software-requirements-and-installation-instructions>

Me to Everyone (11:36 AM)

<https://www.youtube.com/watch?v=hKD4T_9jTc0>

Alicia to Everyone (12:25 PM)

<https://bookdown.org/jboscomendoza/r-principiantes4/la-funcion-plot.html>