Research Methods for Political Science Tutorial 1: Introduction to R

Michele P. McArdle

October 6, 2020

Trinity College Dublin mcardlmi@tcd.ie

Focus of Tutorials

- Weekly Tutorials
- Furthering what we did in class
- Hands-on R
- Applications of concepts and quantitative methods;
- Revision of Homeworks
- Q&A
- Tutorials are NOT recorded, due to issues associated with GDPR.
- Tutorials do not replace the lectures!

Grading I

The module grade consists of three components:

- End-of-term Exam, which makes up 60% of the final grade
 - The exam will consist of short descriptions of relevant concepts, short essay questions and the interpretation of a statistical model.
- **Group paper** counting 16%
 - In this paper, you will set up a (small) research project (based on secondary data) and execute it (including a limited statistical analysis).
 - Groups will be randomly assigned.
 - Due on the last Friday of the teaching term (18.12.2020).

Grading II

- Four assignments each is worth 6%, in total 24%.
 - Due at 5pm on the Friday of each given week.
 - Homework 1: 23.10.2020 (Week 4)
 - Homework 2: 06.11.2020 (Week 6)
 - Homework 3: 27.11.2020 (Week 9)
 - Homework 4: 11.12.2020 (Week 11)
- Note that **5 points per day** will be taken off your mark on assignments submitted late without a valid excuse (capped at 30 points).

The very Basics of R:

Week 1 (today):

- Installing R and R Studio
- Discussing R Studio interface
- Basic Operations
- Types of Variables
- Different types of objects

The very Basics of R:

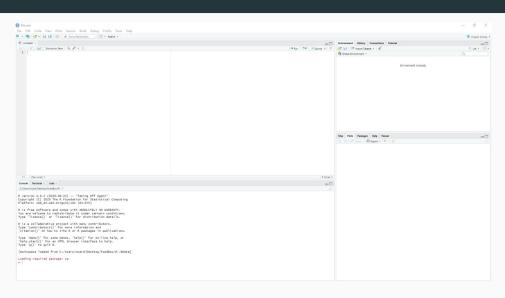
Week 2:

- Creating a Project and file structure
- Reading and Saving Datasets
- Data inspection

Downloading & Installing R

- R: https://cran.r-project.org/
- R Studio: https://rstudio.com/products/rstudio/download/

R Studio Interface



Types of Variables

- Character (aka String)
 - Text denoted by quotation marks, "Hallo World"
- Numeric or Integer
 - Numbers, e.g. 25 3.25 π
- Factors
 - Groups, e.g. Age Groups, Gender, Wage Brackets
 - $\bullet\,$ Special Form is the Binary/Dummy Variable

Questions?