



Introduction to R for Data Analysis

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Logistics

- R experience?
- Documents: <http://www.sfu.ca/~mmalick/R>

Objective of the Course

Provide participants with a foundational knowledge of the R programming language and its applications for data analysis

Outline

1. R basics
2. Data structures and subsetting
3. Reading and writing data
4. Data manipulation
5. Base graphics

Day 1

6. Lattice graphics
7. Data summaries: apply family of functions
8. Intro to statistical models
9. Automation: for loops
10. Automation: writing functions

Day 2

You Try...

1. Interactive component of the course
2. Opportunity to try out the concepts

Disclaimers

- There are many ways to do things in R
- There are over 4500 packages in R, I am not familiar with most of them

Downloading R



<http://www.r-project.org>

Current version: 3.0 (13 May 2013)



<http://www.rstudio.com>

Resources (these are hyperlinks)

Official R Documents

- [An Introduction to R](#)
- [R Data Import/Export](#)
- [Writing R Extensions](#)
- [R Language Definition](#)
- [R Windows FAQ](#)
- [R Mac OS X FAQ](#)
- [R Help Archive \(mailing list\)](#)

Other R Documents

- [Google's R Style Guide](#)
- [Hadley Wickham's Style Guide](#)
- [R Reference Card](#)
- [The R Inferno](#) (excellent summary of R limitations)

