Overview

This document aims at giving the participant a clear idea of what to expect from the *Introduction to R programming I & II* course and a list of prerequisite. Participants at the end of this course can expect to be able to:

- Interact with R using commands passed through the console.
- Import and export data in various formats and transform those data in R.
- Make statistical graphics plots and others.
- Write small scripts and functions using the R language.

The *Introduction to R programming I & II* course are intended as interactive classes where participants would...
Prerequisite

Installing R

Installing R is easy and installers for the major operating systems are provided on CRAN (http://cran.cnr.Berkeley.edu/) as well as detailed instructions. Installing R on Mac OS X does not present any challenge but on the Windows platform this can be a headache for some. Ray Balise posted instructions on his personal web site https://www.stanford.edu/~balise/R4Windows/R4Windows20110623.pptx.

Choosing an interface

R comes with its own graphical interface. Just double click on the R icon and the application starts. An alternative solution to the native interface is RStudio. It is not required to install RStudio, however, this is the interface I will use during the workshop.

RStudio can be found at http://rstudio.org/. There are installers available for every major platform. I do not anticipate any big problem in installing RStudio.

In any case, if you run into an installation problem feel free to contact me by email.

Required R packages

During the class will use different R packages (explanation on what is a package will be given). However, before starting it would be great if the majority of the participants already installed the packages we will use during the class by running those few commands into the R console.

To run those commands start R or RStudio and in the Console and just copy and paste these commands:

```r
install.packages("xlsx")
install.packages("foreign")
install.packages("foreach")
install.packages("multicore")
install.packages("XML")
install.packages("googleVis")
install.packages("reshape")
```

Reading and website where to find help

- Rseek the google for R: www.rseek.org/
- R help: http://cran.r-project.org/manuals.html