



# TOWARDS BIG DATA – INFORMATIC TOOLS FOR DATA MANIPULATION, PART 2

Prof./Dott. Alessandra Stella (National Research Council)
Faculty of Agriculture, Food and Environmental Sciences, Università Cattolica del Sacro Cuore

### **Course Aims**

This course builds upon and extends the content of "Towards Big Data - Informatic Tools for Data Manipulation, part II." While attendance in the previous course is not mandatory, it is highly recommended.

## Methodology

Participants will engage with programming concepts and constructs, develop algorithms, and implement them first into scripts and then into custom functions. They will gain the fundamental knowledge necessary to significantly simplify and automate their analysis routines.

## **Course description**

- 1. Programming 101 [6 hours]
- a. Programming constructs.
- b. Functional programming and algorithms.
- 2. R programming specifics [2 hours]
- a. Custom functions in R.
- b. More on R visualisation.

#### Recommended texts