



Universidad
Politécnica
de Cartagena | Campus
de Excelencia
Internacional

DATA ANALYSIS WITH R

Transversal Activities of Doctorate

Universidad Politécnica de Cartagena

Academic year: 2016-2017

1. General course information					
Name	Data Analysis with R				
Level	Doctorate				
Code	30001023				
University	Universidad Politécnica de Cartagena				
Language	Spanish				
ECTS	1	hours / ECTS	10	Total hours	30

2. Lecture data		
Lecturer in charge	Álvaro Botía Ordaz María del Carmen Bueso Sánchez Antonio Muñoz Franco	
Department	OPADA ("Oficina de Prospección y Análisis de Datos")	
Knowledge area		
Office location	Building "La Milagrosa"	
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Office hours		

3. Course objectives
The objective of this course is to introduce the R programming environment, one of the most popular tools nowadays to prepare, visualize and analyze data. Data analysis is an essential step in any scientific study, and possessing skills for their manipulation and plotting is of great value for PhD students. This course will guide the user through the basics of R, and will open him the door of the worldwide very active R community.

4. Theory programme
1.- Installing R and RStudio.
2.- The structure of R: basic elements.
3.- Import and export data.
4.- Basic data manipulation.

5.- Plots and graphs.

5. Practical programme

Study of practical cases.

6. Hours distribution

Activity	Location	Student work	Hours
Theory programme		Attend class	2
		Homework: study of the theory contents	2
Practice		Attend class	8
		Homework:	16
Tutoring	Virtual	Virtual	2
			30