



Universidad
Politécnica
de Cartagena

Campus
de Excelencia
Internacional

DATA ANALYSIS WITH R

ANÁLISIS DE DATOS CON R

Transversal Activities of Doctorate

Universidad Politécnica de Cartagena

1. General course information					
Name		Data Analysis with R / Análisis de Datos con 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		María del Carmen Bueso Sánchez	
Department/Service		OPADA ("Oficina de Prospección y Análisis de Datos")	
Knowledge area			
Office location		Building "La Milagrosa"	
Telephone		968 325322	Fax
email		mcarmen.bueso@upct.es	
URL / WEB		https://aulavirtual.upct.es/	
Office hours			

3. Course objectives
<p>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.</p>

4. Theory programme
<ol style="list-style-type: none"> 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