



SUBJECT:

ECTS:

SEMESTER:

WEEK	SESSION	DESCRIPTION OF CONTENTS	Indicate special space needs	STUDENT WORK DURING THE WEEK	
				DESCRIPTION	CONTACT HOURS
1	1	Introduction and Descriptive Statistics		Cases/Exercises: Case studies for developing R skills.	
2	2	Exploring categorical and numerical data data.		Cases/Exercises: Real data sets analyzed in R.	
3	3	Numerical Summaries.		Cases/Exercises: Real data sets analyzed in R.	
4	4	Case Study for lessons 1-3.		Complete case studies integrating the concepts studied in previous lessons.	
5	5	Multivariate Data		Case/Exercises: real data sets for learning multidimensional visualization techniques in R	
6	6	Principal Component Analysis for visualization		Case/Exercises: PCA on real data sets using different R libraries	



7	7	Cluster Analysis for data exploration		Case/Exercises: use of a variety R libraries to illustrate how to explore the structure of complex data sets and how to find group in data.	
8	8	Linear Regression		Case/Exercises: use of different R libraries to illustrate the prediction of a variable in terms of a set of predictors in both the univariate and multivariate settings.	
9	9	Introduction to Tidyverse.		Case/Exercises: using big and complex data sets, we will show different techniques for dealing with complex data bases using the Tidyverse libraries.	
10	10	Final Real case study.		Case/Exercises: A real and complex case study integrating every technique from the course.	
11	11				
12	12				
13	13				
14	14				
TOTAL NUMBER OF HOURS					