

## SUBJECT TEACHING GUIDE

### G970 - Multivariate Data Analysis

#### DOUBLE DEGREE IN ADMINISTRATION AND BUSINESS MANAGEMENT AND ECONOMICS

#### First Degree in Economics Degree in Economics

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	DOUBLE DEGREE IN ADMINISTRATION AND BUSINESS MANAGEMENT AND ECONOMICS First Degree in Economics Degree in Economics			Type and Year	Optional. Year 5 Optional. Year 4
Faculty	Faculty of Economics and Business Studies				
Discipline	Subject Area: Statistical Methods				
Course unit title and code	G970 - Multivariate Data Analysis				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. ECONOMIA				
Name of lecturer	FAUSTINO PRIETO MENDOZA				
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Other lecturers					

### 3.1 LEARNING OUTCOMES

- To translate the reality into statistical language.
- To apply statistical procedures to solve economic problems.

#### 4. OBJECTIVES

To learn the theoretical concepts and the basic practices of multivariate analysis.

To use specific statistical software to solve problems of multivariate analysis.

To be able to economically interpret the results of the statistical analysis.

To gain self-autonomy.

To develop teamwork skills.

#### 6. SUBJECT PROGRAM

##### CONTENTS

1	Lecture 1. Introduction to multivariate analysis. Lecture 2. Exploratory multivariate data analysis.
2	Lecture 3. Principal components analysis. Lecture 4. Factorial analysis.
3	Lecture 5. Correspondence analysis. Lecture 6. Cluster analysis.
4	Lecture 7. Discriminant analysis. Lecture 8. Other tools for multivariate analysis.

#### 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Work I	Work	No	Yes	50,00
Work II	Work	No	Yes	50,00
<b>TOTAL</b>				<b>100,00</b>
<b>Observations</b>				
If a student does not pass the course unit in the Ordinary examination session, he/she will be able to resit the exam in the Extraordinary examination session. This exam will include all the contents of the course unit.				
<b>Observations for part-time students</b>				
Part-time students take a final exam out of 10 points with all the contents of the course unit. If a student does not pass the course unit in the Ordinary examination session, he/she will be able to resit the exam in the Extraordinary examination session.				

#### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

##### BASIC

Sarabia, J.M., Prieto, F., Jordá, V. (2018). Prácticas de Estadística con R. Ediciones Pirámide, Grupo Anaya, Madrid.

Peña, D. (2002). Análisis de Datos Multivariantes. McGraw Hill, Madrid.

Everitt, B., Hothorn, H. (2011). An Introduction to Applied Multivariate Analysis with R. Springer