SUBJECT TEACHING GUIDE

1163 - Quantitative Data Analysis

Master's Degree in Health Care Research

Academic year 2025-2026

1. IDENTIFYING DATA					
Degree	Master's Degree in Health Care Research			Type and Year	Compulsory. Year 1
Faculty	Faculty of Nursing				
Discipline	Subject Area: Research Methods Methodological Module				
Course unit title and code	1163 - Quantitative Data Analysis				
Number of ECTS credits allocated	3	Term		Semester based (2)	
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Combination of face-to-face and online training

Department	DPTO. ENFERMERIA
Name of lecturer	MARIA DEL CARMEN ORTEGO MATE
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Other lecturers	CARMEN MARIA SARABIA COBO

3.1 LEARNING OUTCOMES
- 1. Entering data in databases
- 2. Selecting appropriate statistical techniques by virtue of the properties of empirical data
- 3. Applying a statistical analysis to a data set
- 4. Interpreting the results obtained after uni and bivariate statistical analysis
- 5. Preparing a report with the most relevant results obtained from bivariate analysis of empirical data

4. OBJECTIVES
Introduce students to the knowledge of quantitative data analysis

6. SUBJECT PROGRAM	
CONTENTS	
1	1. UNIVARIATE ANALYZES. Contrast on a ratio. Contrast on goodness of fit. Contrasts on the center of a distribution (T test, Wilcoxon test, sign test). Contrasts on the form of a distribution (Kolmogorov-Smirnov test). CLASSROOM PRACTICE 1: Solving exercises with a variable
2	2. BIVARIATE ANALYSIS. Inference with two qualitative variables. Inference with a qualitative variable and a quantitative variable. Inference with two quantitative variables. CLASSROOM PRACTICE 2. Exercises and reading two variables research works
3	3. ANALYSIS WITH THREE OR MORE VARIABLES. ANOVA with two or more factors. Repeated measures ANOVA. . Regression analysis.Factorial analysis CLASSROOM PRACTICE 3. Exercises and reading research papers that employ three or more variables

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Knowledge exam, Written test	Written exam	Yes	Yes	60,00
Practice activities, homework	Work	No	No	28,00
Attendance and participation	Others	No	No	12,00
TOTAL				100,00

Observations
In the event that the health and academic authorities so advise, the evaluation may be carried out remote mode
Observations for part-time students
Students under the part-time regime must communicate their condition, at the beginning of the course, to the responsible teacher. Weight given to the attendance and participation will be shared between the other two methods of evaluation

8. BIBLIOGRAPHY AND TEACHING MATERIALS
BASIC
Martínez, MA.; Faulin, FJ.; Sánchez, A. (2009). Bioestadística Amigable. 3ª edición. Madrid: Diaz de Santos
Pardo, A.; Ruiz, MA.; San Martin, R. (2010) Análisis de datos en ciencias sociales y de la salud II. Madrid: Síntesis
Pardo, A.; Ruiz, MA. (2012). Análisis de datos en ciencias sociales y de la salud III. Madrid: Síntesis