

## SUBJECT TEACHING GUIDE

M1390 - Quantitative Data Analysis

Master's Degree in Health Care Research

Academic year 2021-2022

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	M1390 - Quantitative Data Analysis				
Number of ECTS credits allocated	3	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. ENFERMERIA				
Name of lecturer	MARIA DEL CARMEN ORTEGO MATE				
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Other lecturers	JUAN AMODIA DE LA RIVA 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. COURSE ORGANIZATION

##### 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
4	.

#### 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				
To pass the course it will be necessary to achieve a score of 5 or higher on a scale of 0-10 points. Students who have not obtained a 5 may take the extraordinary evaluation, which will consist of an exam of 10 short questions 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, F.J.; Sánchez, A. (2009). Bioestadística Amigable. 3ª edición. Madrid: Diaz de Santos
- Pardo, A.; Ruiz, MA.; San Martín, 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