SUBJECT TEACHING GUIDE

1172 - Methodology for Quantitative Research

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	1172 - Methodology for Quantitative Research				
Number of ECTS credits allocated	6	Term		Semester based (1)	
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. Selecting a measuring instrument according to a specific object of study based on criteria of validity and reliability
2. Entering data and managing databases
3. Defining variables, calculating sample sizes and performing a descriptive statistical analysis
4. Describe basic statistical concepts applied to care research

4. OBJECTIVES

Introduce students to the knowledge of the methodology of quantitative research

6. SUBJECT PROGRAM

CONTENTS	
1	BLOCK I. MEASURING INSTRUMENTS 1. MEASURING INSTRUMENT REQUIREMENTS. Reliability. Validity. 2. MEASURING INSTRUMENTS. Self-reports. Systematic observation. The self-recording. The bio-physiological measurements. Classroom practice 1. The measuring instruments
2	BLOCK II. STATISTICAL CONCEPTS 3. INTRODUCTION TO DATA ANALYSIS. The data processing. Entering data in a database. Import Data. Types of variables. 4. DESCRIPTIVE STATISTICS. Tables. Graphics. Index. 5. STATISTICAL INFERENCE. Point estimates and confidence intervals. p-value. Hypothesis testing. Parametric and nonparametric tests. 6. SAMPLE SIZE AND SAMPLING Classroom practice 2. Introduction to data analysis. Classroom practice 3. Descriptive statistics. Classroom practice 4. Inferential statistics. Classroom practice 5. Sample size and sampling.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
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, M.A.; Faulín, F.J. y Sánchez, A. (2009). Bioestadística Amigable, 3ª edición. Madrid: Díaz de Santos
Pardo, A., Ruiz, M.A. y San Martín R. (2009). Análisis de datos en ciencias sociales y de la salud I. Madrid: Síntesis.
Pardo, A. y San Martín R. (2010). Análisis de datos en ciencias sociales y de la salud II. Madrid: Síntesis
Argimon, J.M.; Jiménez, J. (2012). Métodos de investigación clínica y epidemiológica (4ª edición). Barcelona: Elsevier
Tomás-Sábado J. (2009) Fundamentos de bioestadística y análisis de datos para enfermería