

SUBJECT TEACHING GUIDE

M1389 - Methodology for Quantitative Research

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 | M1389 - 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 | Face-to-face |

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|------------------|--|--|--|--|--|
| Department | DPTO. ENFERMERIA | | | | |
| Name of lecturer | MARIA DEL CARMEN ORTEGO MATE | | | | |
| E-mail | carmen.ortego@unican.es | | | | |
| Office | Facultad de Enfermería. Planta: + 2. DESPACHO (208A) | | | | |
| 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. COURSE ORGANIZATION

CONTENTS

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

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 | | | | |
| 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 or higher may attend the extraordinary evaluation | | | | |
| 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

