SUBJECT TEACHING GUIDE

5223 - Introduction to Quantative Analysis of Spatial Information

Degree in Geography and Land Planning

Academic year 2026 - 2027

1. IDENTIFYING DATA					
Degree	Degree in Geography and Land Planning			Type and Year	Core. Year 1
Faculty	Faculty of Humanities				
Discipline					
Course unit title and code	5223 - Introduction to Quantative Analysis of Spatial Information				
Number of ECTS credits allocated	6	Term		Semester based (1)	
Knowledge Field	History, archaeology, geography, philosophy and humanities				
Web	https://personales.unican.es/rasillad/docencia/G2040/presentacion.html				
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. GEOGRAFIA, URBANISMO Y ORDENACION DEL TERRITORIO
Name of lecturer	DOMINGO FERNANDO RASILLA ALVAREZ
E-mail	domingo.rasilla@unican.es
Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 1. DESPACHO (1014E)
Other lecturers	

4. OBJECTIVES

The primary objective of the course is to familiarize students with the main methods of statistical analysis used in Geography, as well as the most common graphical and cartographic tools.

6. SUBJECT PROGRAM

CONTENTS	
1	INTRODUCTION:
2	EXPLORATORY DATA ANALYSIS
3	RELATIONSHIP BETWEEN VARIABLES
4	TIME SERIES

5	DELIVERIES AND EVALUATIONS

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessment	%
CONTINUOUS ASSESSMENT	Others	No	No	30,00
INDIVIDUAL TASKS	Work	Yes	Yes	15,00
Assessment of theoretical and practical concepts	Laboratory evaluation	Yes	Yes	55,00
TOTAL				100,00

Observations

The final mark for the module will be the result of averaging the marks from the assessment of theoretical and practical concepts, the individual coursework, and the continuous assessment activities. To obtain this final mark, students must meet the following conditions:
- Have submitted all continuous assessment activities.
- Have submitted the individual coursework.
- Ensure the mark for the Assessment of Theoretical and Practical Concepts is not lower than 4 points (out of a maximum of 10).

In accordance with Article 35 of the UC Assessment Regulations, if the minimum required mark is not achieved, the overall mark will be the lower value between 4.9 and the weighted average of all assessment components.
Fraudulent execution of assessment activities (plagiarism, misappropriation of third-party or AI-generated information without explicit citation, etc.) will entail a fail mark (0) in the module for the corresponding examination sitting. Its consideration and disciplinary framework will be governed by the regulations of the University of Cantabria for such cases.
Special care is recommended in the presentation of the continuous assessment activities and the case study report, and, in particular, in the correct use of materials (maps, charts, tables).

Observations for part-time students

The attention and evaluation of students enrolled part-time in the Degree will be carried out in accordance with the provisions of the UC regulations for such cases.

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

BENITO, M.T.; SANTOS PRECIADO, J.M. (2003) Fuentes, tratamiento y representación de la información geográfica. UNED

REDONDO FGUERA, C.G (2016): El programa R, herramienta clave en investigación. Editorial Universidad de Cantabria.

ROYÉ, D. y SERRANO-NOTIVOLI,R (2019). Introducción a los SIG con R. Prensas de la Universidad de Zaragoza, 1ª ed, 360 pp.

SANTOS, JM y GARCÍA, FJ. (2008). Análisis Estadístico de la Información Geográfica. Cuadernos de la UNED. Madrid.