

## SUBJECT TEACHING GUIDE

M1672 - Design of an applied GIS

Master's Degree in Territorial Resources and Planning Strategies

Academic year 2020-2021

1. IDENTIFYING DATA					
Degree	Master's Degree in Territorial Resources and Planning Strategies			Type and Year	Compulsory. Year 1
Faculty	Faculty of Humanities				
Discipline					
Course unit title and code	M1672 - Design of an applied GIS				
Number of ECTS credits allocated	3	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. GEOGRAFIA, URBANISMO Y ORDENACION DEL TERRITORIO				
Name of lecturer	OLGA DE COS GUERRA				
E-mail	olga.decos@unican.es				
Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 1. DESPACHO PROFESORES (1022)				
Other lecturers	VALENTIN CASTILLO SALCINES				

### 3.1 LEARNING OUTCOMES

- To integrate information in GIS to analyze and to represent it.
- To manage properly geographic information to solve spatial problems based on territorial diagnosis.

### 4. OBJECTIVES

- To provide methodological knowledge to design a GIS Project.
- To implement each phase to create a GIS Project.
- To use an specific GIS Project to calculate spatial analysis operations, which are very important to take spatial decisions.

## 6. COURSE ORGANIZATION

CONTENTS	
1	THE BIOSPHERE RESERVES AS AN SPECIFIC AREA TO DEVELOP A GIS PROJECT.
2	THE FACTOR OF ORGANIZATION IN GIS PROJECTS.
3	IMPLEMENTING A GIS PROJECT 3.1. Data entry 3.2. Integration and implementation
4	MANAGING A GIS PROJECT 4.1. Spatial and thematic queries 4.2. Spatial analysis
5	PRESENTING FINAL RESULTS OBTAINED WITH A GIS PROJECT.

## 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Work: Digital GIS Project.	Work	Yes	Yes	60,00
A multiple choice test about concepts and methods.	Written exam	Yes	Yes	20,00
Class attendance and participation in activities.	Others	No	Yes	20,00
TOTAL				100,00
Observations				
To calculate the final grade is necessary that students get at least 4 points of 10 in the work. The evaluation method related to assistance and participation in class can not be retrieved but if students can justify their ausences, then they could elaborate an additional work to retrieve that mark.				
Observations for part-time students				
Part-time students will be attended according to the internal regulations of the UC.				

## 8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC
OLAYA, V. (2014): Sistemas de Información Geográfica. Tomos I y II. Disponible en formato Pdf en <a href="https://volaya.github.io/libro-sig/">https://volaya.github.io/libro-sig/</a>
FUENZALIDA, M.; BUZAI, G. D.; MORENO JIMÉNEZ, A.; GARCÍA DE LEÓN, A. (2015): "Geografía, geotecnología y análisis espacial: tendencias, métodos y aplicaciones". 1ra ed., Santiago de Chile: Editorial Triángulo. On-line: <a href="https://www.uahurtado.cl/pdf/Fuenzalida_et_al._2015_Geografa_Geotecnologa_y_Analisis_Espacial.pdf">https://www.uahurtado.cl/pdf/Fuenzalida_et_al._2015_Geografa_Geotecnologa_y_Analisis_Espacial.pdf</a>
TOMLINSON, R. (2007): Pensando en el SIG: Planificación del Sistema de Información Geográfica dirigida a gerentes. Redlands (California): Esri Press.