

## SUBJECT TEACHING GUIDE

### 217 - Geomorphology and Geoarchaeology

#### Master's Degree in Prehistory and Archaeology

Academic year 2023-2024

1. IDENTIFYING DATA					
Degree	Master's Degree in Prehistory and Archaeology			Type and Year	Optional. Year 1
Faculty	Faculty of Humanities				
Discipline	Optional Subjects in Both Specialities				
Course unit title and code	217 - Geomorphology and Geoarchaeology				
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. CIENCIA E INGENIERIA DEL TERRENO Y DE LOS MATERIALES				
Name of lecturer	MIGUEL ANGEL SANCHEZ CARRO				
E-mail	miguelangel.sanchez@unican.es				
Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 1. DESPACHO (1080)				
Other lecturers					

### 3.1 LEARNING OUTCOMES

- The student will be able to apply geological and geomorphological procedures in the area surrounding archaeological sites.

### 4. OBJECTIVES

- Description of the main geomorphological environments: fluvial, slopes, karst and lakes.
- Introduction to the analysis of the geological and geomorphological maps
- Introduction to the analysis of aerial photography and its uses in Geomorphology
- Achievement of a basic knowledge about Geoarchaeological topics
- Achievement of basic knowledge about optical microscopy applied to Geoarchaeology.

6. COURSE ORGANIZATION	
CONTENTS	
1	Weathering and soils. Principles of the micromorphology and uses in geoarchaeology.
2	Geomorphological processes. Geomorphological shapes caused by erosion and deposit. Introduction to aerial photography and uses in the geomorphological mapping of fluvial and slope areas.
3	Geoarchaeology: principles and uses
4	Geoarchaeology. Field and laboratory procedures. Management of Geological Information with GIS. Field trip.
5	Field trip to the Miera River valley (glacial geomorphology) or coast zone.

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Practical activities in the laboratory of Geomorphology of the Civil Engineering School.	Laboratory evaluation	No	Yes	50,00
Individual activities: Summary of the activities carried out in the laboratory of thin sections and during practical activities with SIG software.	Work	No	Yes	50,00
TOTAL				100,00
Observations				
STUDENTS WITH SPECIAL NEEDS				
In the case of students with special needs recognized by the SOUCAN, the teacher will assess the application of the recommendations of the SOUCAN as best as possible, in order to allow the evaluation of these students with the same guarantees as the rest.				
Observations for part-time students				
Students with partial dedication can participate in the different activities of evaluation.				

8. BIBLIOGRAPHY AND TEACHING MATERIALS
BASIC
<ul style="list-style-type: none"> <li>* Allison, R.J. Applied Geomorphology. Edit. John Wiley and sons. 2002.</li> <li>* Reineck, H. E. and Singh, I.B. Depositional sedimentary environments : with reference to terrigenous clastics. Springer-Verlag. 1973</li> <li>* Encyclopedia of quaternary science. Elsevier. Acceso on line desde la BUC y en versión impresa para consulta en biblioteca.</li> <li>* Goldberg, P. &amp; Macphail, R.I. (2006). Practical and theoretical Geoarchaeology. Blackwell Publishing, Oxford, - Harris, E.C.</li> <li>* Rapp, G. &amp; Hill, C.L. (1998). Geoarchaeology: the Earth-Science approach to archaeological interpretation. Yale University Press, London, 274 pp.</li> <li>* Courty, M.A., Goldberg, P. &amp; Macphail, Richard, 1989. Soils and micromorphology in archaeology. Cambridge Manuals in Archaeology. Cambridge University Press. UK.</li> <li>* Grau Mira, Ignacio. (2006). La aplicación de los SIG en la arqueología del paisaje / Ignacio Grau Mira (ed.). Universidad de Alicante. 259 pp.</li> </ul>

