

## SUBJECT TEACHING GUIDE

G1827 - Applied Geomorphology

Degree in Civil Engineering

Academic year 2022-2023

1. IDENTIFYING DATA			
Degree	Degree in Civil Engineering	Type and Year	Optional. Year 4
Faculty	School of civil Engineering		
Discipline	Optional Subjects: Open to all Itineraries		
Course unit title and code	G1827 - Applied Geomorphology		
Number of ECTS credits allocated	6	Term	Semester based (2)
Web			
Language of instruction	English	Mode of delivery	Face-to-face

Department	DPTO. CIENCIA E INGENIERIA DEL TERRENO Y DE LOS MATERIALES
Name of lecturer	VIOLA MARIA BRUSCHI
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Other lecturers	

### 3.1 LEARNING OUTCOMES

- Identification of the main landforms and surface processes
- Identification of the main problems of Engineering Projects due to surface processes.
- Learn how to use of areal photographs for the geomorphologic analysis.
- Learn how to manage the geomorphologic data/information using GIS software (ArcGis)

#### 4. OBJECTIVES

Description of basic concepts on the Geomorphology.  
 Identification of the main fluvial processes and landforms.  
 Interpretation of slopes system.  
 Understanding the basic concepts on lithologic and structural morphology.  
 Description of the main characteristics of karstic morphology.  
 Introduction to a climatic morphology.  
 Know how to use of areal photographs for the geomorphologic analysis.  
 Analyse the geomorphologic features using GIS software (ArcGis).

#### 6. COURSE ORGANIZATION

CONTENTS	
1	Basic concepts on the Geomorphology. Weathering.
2	Fluvial morphology: processes, landforms and deposits.
3	Slopes system.
4	Geomorphologic risks. Field trip.
5	Geomorphologic analysis using GIS software (ArcGis).

#### 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Descripción Practical activities	Others	No	No	40,00
Descripción Project in group and results presentation	Oral Exam	Yes	Yes	60,00
TOTAL				100,00
Observations				
Observations for part-time students				
<p>In order to obtain the evaluation of the 40% CORRISPONDING TO the practical activities, students with a partial dedication should submit a practical work for each subject presented in class.            Moreover, to obtain the finally 60%, they should participate to the group work at the end of the semester</p>				

#### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

##### BASIC

J. de Pedraza Gilsanz et al. (1996). Geomorfología: principios, métodos y aplicaciones. Edit. Rueda.  
 M. Gutiérrez Elorza (2008). Geomorfología. Edit. Pearson Educación.