VNIVERSITAT DE VALÈNCIA

Course Guide
33786 Geomorphology I: The Formation of the Terrain

COURSE DATA

Data Subject	
Code	33786
Name	Geomorphology I: The Formation of the Terrain
Cycle	Grade
ECTS Credits	6.0
Academic year	2018 - 2019

Study (s)

Degree	Center	Acad. year	Period
1318 - Degree in Geography and the Environment	Faculty of Geography and History	2	First term

Subject-matter

Degree	Subject-matter	Character
1318 - Degree in Geography and the Environment	596 - Geomorphology	Obligatory

Coordination

Name	Department
ESTRELA NAVARRO, MARIA JOSE	195 - Geography
SEGURA BELTRAN, FRANCISCA	195 - Geography

SUMMARY

The Earth's relief is formed by the interaction among different spheres, that is, lithosphere, atmosphere, hydrosphere and biosphere. The object of study of Geomorphology I is the analysis of the landforms of the Earth, its genesis and evolution.

On the subject I Geomorphology: the formation of the relief, the most important themes studied are: lithological and tectonic fundamentals of the Earth relief; large and small-scale tectonic and structural landforms and relationship between structure and drainage patterns.

The subjects Geomorphology I: The formation of the relief, and Geomorphology II: Processes, forms and systems, also intended that students acquire the basic theoretical principles of geomorphology, to understand the work of geomorphic systems based on the study of interactions that occur within the natural system.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

The student must have studied the subject Introduction to Physical Geography.

OUTCOMES

1318 - Degree in Geography and the Environment

- Have capacity for analysis and synthesis.
- Have oral and written communication skills in one's own language and in a foreign language.
- Be able to work independently.
- Be able to work in interdisciplinary teams.
- Show motivation for quality, responsibility and intellectual honesty.
- Learn about physical geography.
- Learn about methodology and fieldwork.
- Be able to relate the natural environment and the social and human spheres.
- Analyse and value landscapes from a spatial-temporal perspective.
- Learn basic techniques for fieldwork in geography and particularly for reading and interpreting the landscape in geographic terms.

LEARNING OUTCOMES

Basically they could be summarized as:

- To elaborate explanatory hypotheses of geomorphological processes both local and global scales.

- To be able to understand the geological, geomorphological maps and diagrams of structural reliefs.

- Visual identification of rocks and minerals.

- To understand the fundamental concepts to identify, characterize and classify the different forms of structural relief.

- To acquire fluency in managing mapping techniques of relief morphostructures

DESCRIPTION OF CONTENTS

1. Geomorphology as part of the earth and environmental sciences

2. Tectonic activity on the planet

3. Large scale tectonic landforms

4. Earth crust materials

5. Small-scale structural landforms (regional and local)

6. Modeling and properties of the rocks

7. Process and local scales in landscape formation

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Other activities	15,00	100
Classroom practices	15,00	100
Attendance at events and external activities	15,00	0
Study and independent work	30,00	0
Preparation of evaluation activities	15,00	0
Resolution of case studies	30,00	0
TOTAL	**150,00**	

TEACHING METHODOLOGY

THEORETHICAL CLASSES :

The explanations of the theoretical classes are supported with a dossier of figures and graphs, some of which will be posted on the Virtual Classroom of the University of Valencia. Active student participation is highly recommended so continued assistance to theoretical and practical classes and field trips will be assessed.

PRACTICES:

The student must submit a report of all the practical exercises and field trips.

PREPARATION OF THEORETICAL CLASSES:

In order to reinforce the concepts and ideas presented in lectures, a series of readings will be proposed as well as a set of exercises.

PRACTICAL WORK PREPARATION:

The student must submit a report of all the exercises, lectures, practical or fieldwork.

Field practices are essential to strengthen and consolidate the knowledge acquired in the theoretical classes, so their attendance is recommended

COMPLEMENTARY ACTIVITIES:

In relation to each topic a series of activities (practices in map library and laboratory) designed to complement and consolidate knowledge developed in the theoretical part will be proposed.

The internship program (15 hours) will consist of:

1. Analysis and review of geological maps.

2. Recognition of rocks and minerals.

3. Photointerpretation and mapping of structural landforms.

Fieldwork: a total of 8 hours of practical class will be made in the field

EVALUATION

The evaluation of the subject will be carried out from:

- Theoric exam (70%). It will be essential to obtain a score of 4 out of 10 so that the notes of the practices and complementary activities can be considered.

- Practical exam (20%). It will be necessary to get a 3 out of 10 so that the notes can be considered.

- The practices and all the complementary activities carried out during the course, besides the final exam, will be considered continuous evaluation. As such, they will be "NOT RECOVERABLE". Therefore, the qualification obtained will be counted both in the first and in the second call.

CONTINUOUS EVALUATION	% QUALIFICATION
Theoric exam	70%
Practical exam	20%
Complementary activities	10%
TOTAL	100 %

REFERENCES

Basic

- De Dios Centeno, J., Fraile, M.J., Otero, M.A. y Pividal, A.J. 1994. Geomorfología práctica: ejercicios de fotointerpretación y planificación geoambiental. Madrid: Rueda.
- Gutiérrez Elorza, M. 2008. Geomorfología. Pearson. 898 pp.
- García Fernández. J. 2006. Geomorfología estructural. Barcelona: Ariel Geografía y Universidad de Alicante.
- Hugget, R.J. 2003. Fundamentals of Geomorphology. Fundamentals of Physical Geography Series. London: Routledge.
- De Pedraza Gilsanz, J. 1996. Geomorfología. Principios, métodos y aplicaciones. Madrid: Rueda.
- Guerra-Merchán, A. 1994. Mapas y cortes geológicos. Interpretación y resolución de problemas geológicos. Colección CEP. Malaga: Ciencia y Técnica.
- Martínez Álvarez, J.A. 1991. Mapas geológicos: explicación e interpretación. Madrid: Paraninfo.
- Strahler, A. 1987. Geología Física. Barcelona: Omega.
- Rice, J. 1983. Fundamentos de Geomorfología. Madrid: Paraninfo.
- Tejada, G. 1994. Vocabulario geomorfológico. Madrid: Akal.

- Peulvast, J.P. et Vanney, J.R. 2002. Géomorphologie structurale. Terre, corps planetaires solides. T. I: Relief et structure. Paris: Collection Géosciences.