

# DEGREE CURRICULUM METHODS OF STUDYING THE PHYSICAL ENVIRONMENT

Coordination: BATALLA VILLANUEVA, RAMON J.

Academic year 2020-21

## Subject's general information

Subject name	METHODS OF STUDYING THE PHYSICAL ENVIRONMENT						
Code	101162						
Semester	1st Q(SEMESTER) CONTINUED EVALUATION						
Туроlоду	Degree		Course	Character		Modality	
	Bachelor's Degree in Geography 2 COI		MPULSORY	Attendance- based			
Course number of credits (ECTS)	6						
Type of activity, credits, and groups	Activity type	PRAULA		TEORIA			
	Number of credits	5.5		0.5			
	Number of groups			1			
Coordination	BATALLA VILLANUEVA, RAMON J.						
Department	ENVIRONMENT AND SOIL SCIENCES						
Teaching load distribution between lectures and independent student work	<ul> <li>Face-to-face teaching (classroom or online): 60 hours</li> <li>Student's autonomous work: 90 hours</li> </ul>						
Important information on data processing	Consult this link for more information.						
Language	Catalan / Spanish						
Distribution of credits	<ul> <li>Theory (classroom or online): 0.5</li> <li>Practical work (classroom and fieldwork): 5.5</li> </ul>						

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
BATALLA VILLANUEVA, RAMON J.	ramon.batalla@udl.cat	,5	
TENA PAGAN, ALVARO JOAQUIN	alvaro.tena@udl.cat	5,5	

## Subject's extra information

- Study of methods and techniques of field measurement
- Data treatment, data analysis, URL resources, geoscience mapping interpretation.
- Practical subject in which the students apply and work methodologically to theoretical knowledge taught in the subject of Physical Geography.
- Prerequisites: It is necessary to have previously studied the subject of Physical Geography

## Learning objectives

**O.1.** Apply techniques and methods in Physical Geography for the characterization and description of some of the main elements and processes of the physical environment.

The course shall be developed in person and / or virtual modes depending on the limitations or restrictions imposed by the competent bodies (University of Lleida, Generalitat de Catalunya, Gobierno de España) during the course of the corresponding semester. All the contents and methodological axes have already been adapted to guarantee the achievement of the subject's competencies in whatever way it is finally taught. In the event that the field sessions cannot be carried out, they will be replaced by theoretical classes in which techniques and methods will be presented during specific presentations.

#### Learning outcomes:

- Know the operation and transport dynamics of rivers
- Ability to collect and process data and analysis of time series (climatic, hydric ...)
- Training for field work in physical geography, and in particular in the study of water processes

- Ability to apply geographic techniques, and description and research in specific situations in the territory and the environment

## Competences

CB1 Possess and understand knowledge in a study area that starts at the base of secondary education general, and is usually found at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study

CB2 Apply their knowledge to their job or vocation in a professional way and possess the competences that They are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within your study area 2020-21

CB5 Know how to develop the learning skills necessary to undertake further studies with a high 2020-21 degree of autonomy

OET Manage and use the methods and teeningues of anarysis and interpretation of statistical sources

CE4 Use information from topographic mapping

- CE6 Acquire the geographer's fieldwork skills and methodologies.
- CT3 Acquire training in the use of new technologies and information technologies and the communication
- CT5 Acquire essential notions of scientific thought

#### Subject contents

The subject is directly related to the theoretical knowledge previously taught in the subject of Physical Geography.

#### **Fluvial Module**

Practice 1. The longitudinal profile of a river

Practice 2. Flow calculation. Estimation from field data. Roughness and Manning

Practice 3. Calculation of the flow in regular sections (gauges)

Practice 4. Estimation of the flow in rivers (relationship with practice 3 of the hydrology block).

#### Hydrological Module

Practice 1. Hydrological Regime: analysis of flow series and extraction of statistics (mean, flows monthly, etc.). Flow Frequency Curve.

Practice 2. Comparison between basins (specific flows, runoff coefficients etc.)

Practice 3. Flood regime. Frequency and Magnitude. Return periods.

#### Methodology

- Face-to-face or online sessions in the classroom
- Classroom practices (face-to-face or online)
- Individual and group tutorials
- Weekly monitoring of the progress of each practice in the classroom (virtual)
- Continuous delivery of exercises
- Use of computer tools and statistics: databases
- Demonstration of tools by teachers (face-to-face or through videoconferences)
- Specific work outside the classroom by the student
- Doubts solving through videoconferences
- Solving problems demonstration videos

- Set-up of forums (Virtual Campus) for the discussion of problems that arise when carrying out the practical exercises

### Development plan

This subject develops in a practical way the contents of the subject of Physical Geography.

Information on data protection in audiovisual recording: in accordance with current regulations on the protection of

personal data, we inform you that.

- The University of Lleida - UdL- is responsible for the recording and use of your images and voice (contact details of the representative: General Secretariat. Plaça Víctor Siurana, 1, 25003 Lleida; sg@udl.cat; contact details of the data protection delegate: dpd@udl.cat).

- Your recorded image and voice will be used exclusively for the purposes inherent in the teaching of the subject.

- Your recorded image and voice will be kept until the end of the current academic year, and will be destroyed in the terms and conditions provided for in the regulations on conservation and disposal of administrative documents of the UdL, and the document evaluation tables approved by the Generalitat de Catalunya (http://www.udl.cat/ca/serveis/arxiu/).

- Your voice and image is essential to teach in this subject, and teaching is a right and a duty of the teaching staff of the Universities, which must exercise with freedom of chair, as provided in article 33.2 of the Law Organic Law 6/2001, of December 21, of universities. For this reason, the UdL does not need your consent to record your voice and image for this sole purpose, to teach in this subject.

- The UdL will not transfer the data to third parties, except in the cases strictly provided for in the Law.

- You can access your data; request rectification, deletion or portability; oppose the treatment and request its limitation, as long as it is compatible with the purposes of teaching, by writing to dpd@udl.cat. You can also submit a complaint to the Catalan Data Protection Authority, through the Authority's electronic office (https://seu.apd.cat) or by non-electronic means.

## **Evaluation**

- <u>Continuous evaluation</u> of the practices that are carried out during the practical classes. There will be a total of 7 practical exercises following the contents and distribution of credits for the subject. Each internship counts 13% of the final grade of the subject (all practical exercises mean 91% of the final grade)

- Each practice must be passed with a minimum grade of 5

- Delivery of each internship 15 days after completion (Continuous Assessment)

- In the event that the internships do not obtain a minimum grade of 5, or are not delivered within the established period, they must be delivered on the day of the final exam (according to the official calendar of the Faculty of Arts). In this case the maximum grade to choose will be 5.

- Attendance to theoretical classes, and personal work and tutoring classes (up to 9%) is valued.

- Any attempt to plagiarize classroom and field practice will automatically result in the subject being suspended.

<u>Note</u>: The evaluation is continuous. Students who combine their studies with a full-time job are entitled to request an alternative assessment within 5 days from the beginning of the semester. For more information, send an email to academic@lletres.udl.cat or contact the Secretariat of the Faculty of Arts.

### Bibliography

- STRAHLER, A. (1987): Geografía Física. Omega, Barcelona, 767 p.
- BALASCH, J.C., BATALLA, R.J., MÀSICH, J.M., VERICAT, D. (2016) (eds.): Geografia física. Fundació per la Universitat Oberta de Catalunya. Barcelona, 408 p.

In addition, lecturers will supply specific references in relation to subject contents.