



# **Laboratory Techniques and Field Work**

Code: 104266 ECTS Credits: 6

Degree	Туре	Year	Semester
2503710 Geography, Environmental Management and Spatial Planning	ОТ	4	1

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

#### Contact

# **Use of Languages**

Name: David Molina Gallart

Principal working language: catalan (cat)

Email: David.Molina@uab.cat

Some groups entirely in English: No Some groups entirely in Catalan: Yes

Some groups entirely in Spanish: No

# **Prerequisites**

It is highly recommended to have taken and passed most of the compulsory Physical Geography subjects of the degree.

## **Objectives and Contextualisation**

The most important goal of this subject is to have fun learning.

The object of study will be focused on the soils and for this purpose a field trip of 5, or more days, will be made for the study of the same and the collection of samples for analysis in the laboratory.

## Competences

- Apply methods and techniques of quantitative, qualitative and field work analysis in the interpretation of territorial and environmental processes.
- Combine distinct techniques and methods of representation and spatial analysis in elaborating materials for transmitting results.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.

#### **Learning Outcomes**

- 1. Combine distinct techniques and methods of representation and spatial analysis in elaborating materials for transmitting results.
- 2. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- 3. Understand the main sources of information and scientific documentation related to regional and environmental processes.

## Content

Soils: central elements of the physical environment and non-renewable resource.

Definition of soil and horizons.

The physical and chemical properties of soils.

Methods of analysis.

Soil maps and soil assessment.

# Methodology

The methodology of this subject is practical. The field techniques at the field trip and the laboratory techniques in the realization of the protocols will be explained.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## **Activities**

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Field trip	20	0.8	1, 3, 2
Laboratory work	25	1	1, 3
Theoretycal sessions	5	0.2	1, 3, 2
Type: Supervised			
Sample collection preparation	20	0.8	
Type: Autonomous			
Field tryp preparation	50	2	

#### **Assessment**

The evaluation of this subject will be based on a single document that brings together the knowledge acquired in the field and the protocols carried out in the laboratory.

There is no exam or recovery.

Both the field report and the laboratory protocols may be sent to the professor before final delivery, as many times as necessary, to make the appropriate pre-corrections and thus ensure their successful arrival.

Even so, a place and date will be set for the review of their qualification.

Not evaluable implies not attending the field trip or laboratory practices.

#### **Assessment Activities**

Title Weighting Hours ECTS Learning Outcomes
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Field report	50%	15	0.6	1, 3, 2
Laboratory work	50%	15	0.6	1, 3, 2

# **Bibliography**

COBERTERA, E. (1983), Edafologia aplicada, Madrid, Cátedra.

McRAE, S.G. (1988), Practical Pedology. Studyng Soils in the Field, E. Horwood, New York.

PORTA, J, LÓPEZ-ACEVEDO, M & ROQUERO, C. (1994), Edafologia para la agricultura y el medio ambiente , Madrid.

# **Software**

See "continguts"