



Universitat de Lleida

# DEGREE CURRICULUM

# **METHODS OF STUDYING THE PHYSICAL ENVIRONMENT**

Coordination: TENA PAGAN, ALVARO JOAQUIN

Academic year 2023-24

# METHODS OF STUDYING THE PHYSICAL ENVIRONMENT 2023-24

## Subject's general information

|                                                                          |                                                                                                  |        |            |                  |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------|------------|------------------|
| Subject name                                                             | METHODS OF STUDYING THE PHYSICAL ENVIRONMENT                                                     |        |            |                  |
| Code                                                                     | 101162                                                                                           |        |            |                  |
| Semester                                                                 | 1st Q(SEMESTER) CONTINUED EVALUATION                                                             |        |            |                  |
| Typology                                                                 | Degree                                                                                           | Course | Character  | Modality         |
|                                                                          | Bachelor's Degree in Geography                                                                   | 2      | COMPULSORY | Attendance-based |
|                                                                          | Double degree: Bachelor's degree in Geography and Bachelor's degree i Tourism                    | 2      | COMPULSORY | 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      |            | 1                |
| Coordination                                                             | TENA PAGAN, ALVARO JOAQUIN                                                                       |        |            |                  |
| Department                                                               | ENVIRONMENT AND SOIL SCIENCES AND CHEMISTRY                                                      |        |            |                  |
| Teaching load distribution between lectures and independent student work | - Face-to-face teaching (classroom or online): 60 hours<br>- Student's autonomous work: 90 hours |        |            |                  |
| Important information on data processing                                 | Consult <a href="#">this link</a> for more information.                                          |        |            |                  |
| Language                                                                 | Catalan (practice F1) / Spanish (practice F2, H1, H2, C1)                                        |        |            |                  |
| Distribution of credits                                                  | - Theory (classroom or online): 0.5<br>- Practical work (classroom and fieldwork): 5.5           |        |            |                  |

# METHODS OF STUDYING THE PHYSICAL ENVIRONMENT 2023-24

| Teaching staff               | E-mail addresses      | Credits taught by teacher | Office and hour of attention |
|------------------------------|-----------------------|---------------------------|------------------------------|
| BATALLA VILLANUEVA, RAMON J. | ramon.batalla@udl.cat | 1                         |                              |
| TENA PAGAN, ALVARO JOAQUIN   | alvaro.tena@udl.cat   | 5                         |                              |

## 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 ...)
- 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

CE1 Manage and use the methods and techniques of analysis 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.

### Module #1. Fluvial systems

Practice F1. The longitudinal profile of a river

Practice F2. Flow calculation. Estimation from field data. Roughness and Manning. Regular sections (gauges) ( In relation with practice 2 of the hydrology block)

### Module #2. Hydrological and data analysis

Practice H1. Hydrological Regime: analysis of flow series and extraction of statistics (mean, flows monthly, etc.). Flow Frequency Curve. Comparison between series.

Practice H2. Flood regime. Frequency and Magnitude. Return periods.

### Module #2. Climate and data analysis

Practice C1. Characterization of climatic series. Climate graphical representations. Climate classification.

## Methodology

- Face-to-face or online sessions in the classroom
- Classroom practices (face-to-face or online)- Problems' solving
- 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
- 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](mailto: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

### Practice blocks

- **Practice block #1. Continuous evaluation of the practices** based on the practical exercises given in class following the contents and distribution of credits of the subject (30% of the final mark).
- **Practice block #2. Continuous evaluation of the practices** based on the practical exercises given in class following the contents and distribution of credits of the subject (30% of the final mark).
- **Practice block #3. Continuous evaluation of the practices** based on the practical exercises given in class following the contents and distribution of credits of the subject (15% of the final mark).
- Submission of each practice up to a maximum of 15 days after its completion (continuous evaluation)
- Each practice must be passed with a minimum grade of 5 and you must pass **ALL** the practices to pass the subject.
- All practice blocks are recoverable and the maximum delivery date of the failed practices will be that of the recovery exam (according to the official calendar). In this case, the maximum grade that can be obtained will be 5.

### Theoretical block

- **Theoretical block. Final exam** (25% of the final mark). The exam will be held on the day, time and place set by the faculty. The exam has the right to make up for it, which will take place on the day, time and place set by the faculty. You will need to bring a calculator to the exam.

### Other considerations

Attendance in class (theory, practicals and personal work) and tutoring sessions (up to a maximum of 5% of the final grade) will be assessed once the assessment tests (practice blocks and theoretical block) have been passed.

### Plagiarism or copying

Law 2/2022 on university coexistence regulates what is considered academic fraud: any premeditated behavior tending to falsify the results of an exam, one's own or someone else's, taken as a requirement to pass a subject or certify academic performance. Offenses can be serious or very serious. You can consult the UdL at [Normativa de convivència universitària](#)

When copy is detected:

- If you copy or plagiarize with fraudulent means, the assessment activity will be withdrawn (therefore it will be suspended) and a report and the evidence will be sent to the coordination of the degree and the heads of studies to start a disciplinary file. The applicable sanctions include, among others and depending on the seriousness of the fault, the loss of the right to be evaluated for the subject, the loss of enrollment for a semester or a course or expulsion for up to three years.
- If there is spontaneous copying between students (behaviors such as speaking in an exam, looking at a colleague's exam, etc.) measures will be applied that may lead to the withdrawal of the activity (therefore, it is suspended). A report will also be made to the coordination of the degree and to the heads of studies if it is considered appropriate to open a disciplinary file.

### Alternative assessment

Students who combine their studies with a full-time job or for reasons of family conciliation have the right to request

an alternative assessment at the beginning of the semester. The student who wants to take part in the alternative assessment must present a work contract or justify, in writing addressed to the dean, the reasons that make it impossible for him to take the continuous assessment within five (5) days from from the beginning of the semester. For more information, send an email to [academic@lletres.udl.cat](mailto:academic@lletres.udl.cat) or contact the Secretariat of the Faculty of Letters. The alternative assessment test will consist of a global written test that will account for 100% of the final mark of the subject

## Bibliography

- STRAHLER, A. (1987): Geografia 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, specific bibliography and various materials will be provided according to the topic covered in the Virtual Campus (resources folder).