

Introduction to Physical Geography

Code: 104236
ECTS Credits: 6

2025/2026

Degree	Type	Year
Geography, Environmental Management and Spatial Planning	FB	1

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Teachers

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Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

Know how to read with a good reading comprehension and write in Catalan and / or Spanish language fluently, clear grammar constructions and without spelling mistakes

Be able to understand a short text in a foreign language (preferably English or French)

Know the four math rules smoothly and know how to use conversion factors

Know how to handle changes in metric, surface, capacity and volume units

Have basic notions about trigonometric functions (not trigonometry)

To take this course you must have a command of Catalan and/or Spanish equal to or higher than level B2

Objectives and Contextualisation

The general objective of the subject is an introduction to the study of the different elements that make up the physical environment and the processes and interactions that occur between them. Planet Earth is studied as a member of the solar system and as a globe and within the planet, the atmosphere, the hydrosphere, the lithosphere and the biosphere.

The training objectives are in:

The acquisition of a set of basic and grounded knowledge on each of the topics covered
the mastery of the most important concepts used in physical geography and the techniques of analysis and
resolution of practical exercises.

Obtaining a vision of the whole and basic interpretative keys of the operation of the physical environment on a
planetary scale and the identification of these processes at local level

The achievement of a good capacity to deal with geographic information, interpret it, represent it and transmit it
The training to establish significant connections between the different thematic aspects of the program and
with other subjects

Learning Outcomes

1. CM04 (Competence) Design and carry out a group project related to physical geography linked to field practice.
2. CM05 (Competence) Communicate by means of a poster and oral presentation the results of a collective study on a practical case related to physical geography.
3. KM07 (Knowledge) Describe the planet earth as an integrated system of different physical dimensions.
4. KM08 (Knowledge) Define the fundamental concepts for the systemic knowledge of the basic components or subsystems of the physical environment: atmosphere, hydrosphere, lithosphere and biosphere.
5. SM06 (Skill) Solve practical exercises using knowledge and techniques related to physical geography (solar system, lithosphere, atmosphere).
6. SM06 (Skill) Solve practical exercises using knowledge and techniques related to physical geography (solar system, lithosphere, atmosphere).

Content

Block 1: INTRODUCTION

- Unit 01: Introduction to geography and physical geography

Block 2: THE SOLAR SYSTEM AND THE EARTH PLANET

- Unit 02: The globe. The geographic network
- Unit 03: The solar system and planet Earth
- Unit 04: The topographic map

Block 3: THE LITHOSPHERE

- Unit 05: Seismicity and tectonics of plates
- Unit 06: Introduction to petrology. Igneous or magmatic rocks
- Unit 07: Sedimentary rocks
- Unit 08: metamorphic rocks

Block 4: ATMOSPHERE

- Unit 09: The atmosphere. Composition and structure
- Unit 10: Insolation and energy balance

- Unit 11: Atmospheric pressure and winds
- Unit 12: Atmospheric humidity, clouds and precipitation
- Unit 13: Introduction to climatology

In this subject, gender perspective will be taken into account in the following aspects:

- Not allowing a sexist use of language in the students' oral and written contributions.
- Writing, in the references, the full names of authors, instead of only the initial.

In this course, the use of AI is restricted:

For this course, the use of Artificial Intelligence (AI) technologies is permitted exclusively for support tasks, such as bibliographic or information searches, text correction, or translations. When requested and when necessary, the student must clearly identify which parts have been generated with this technology, specify the tools used, and include a critical reflection on how these have influenced the process and the final result of the activity. Non-transparency in the use of AI in this assessable activity will be considered academic dishonesty and may result in partial or total penalties in the activity grade, or more severe sanctions in serious cases.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Field work	16.67	0.67	CM04, CM05, CM04
Laboratory work	8.33	0.33	CM04, SM06, CM04
Master class	20	0.8	KM07, KM08, SM06, KM07
Type: Supervised			
Seminar on the ground	25	1	CM04, CM05, KM07, KM08, CM04
Type: Autonomous			
Study and preparation of work and practical exercises	75	3	CM04, CM05, SM06, CM04

Autonomous types

Practical exercises: autonomous work under the responsibility of the students with mandatory partial submissions when requested by the teaching staff, following the indications of the academic calendar. These will not change regardless of whether the teaching is face-to-face or virtual.

Directed Types

Theory: lectures in the classroom, laboratory practices, and field practices. These will be adapted, if necessary, to any percentage of virtual teaching through various existing systems (Teams, narrated PowerPoints, videos, podcasts, etc.), as was done during the confinement period.

Supervised Types

Field trips: mandatory, including one half-day trip and one 3-4 day trip. The latter includes a preliminary task for the students consisting of a collective work (maximum 3 people per group) subject to evaluation, related to the place to be visited. During the trip, each group will present their conclusions to the rest of the class.

At the beginning of the course, the teaching staff will explain the protocol of measures and best practices for field trips. The Faculty's Field Trip Protocol will be applied during these trips.

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.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Field work poster	20%	0	0	CM04, CM05
Practical exams	40%	3	0.12	SM06
Theoretical exam	40%	2	0.08	KM07, KM08

This subject/module does not incorporate single assessment.

Poster field trips. 3-4-day field trip work (collective poster)

Practice exams for each block, in total 3 exams (individual test)

Theory tests of each unit or group of units, in total 6 tests (individual test)

Comments

1. To be evaluated, all the practices must be delivered within the established deadlines.
2. In order to be entitled to the recovery exam, students must have obtained an average grade of the subject equal to or greater than 3,5. In this case, all the suspended parts must be recovered up to a maximum of 3 tests (practical) and 3 tests (theoretical) (who has suspended more than 3 partial tests will not have the right to submit to the recovery and will have a suspense of the subject). Otherwise (if an average 3,5 were not obtained), the subject will be considered suspended
3. In the event of a student committing any irregularity that may lead to a significant variation in the grade awarded to an assessment activity, the student will be given a zero for this activity, regardless of any disciplinary process that may take place. In the event of several irregularities in assessment activities of the same subject, the student will be given a zero as the final grade for this subject and cannot be evaluated.
4. Attendance at all field trips is essential to be evaluated, therefore non-attendance at any of them implies a non-evaluatable.

5. Students will obtain a Not assessed/Not submitted course grade unless they have submitted more than 1/3 of the assessment items.

6. Any particular case will be considered by the teachers in order to ensure fair treatment and avoid harm to students.

In the event that tests or exams cannot be taken onsite, they will be adapted to an online format made available through the UAB's virtual tools (original weighting will be maintained). Homework, activities and class participation will be carried out through forums, wikis and/or discussion on Teams, etc. Lecturers will ensure that students are able to access these virtual tools, or will offer them feasible alternatives.

The teaching methodology and the evaluation proposed in the guide may undergo some modification subject to the onsite teaching restrictions imposed by health authorities.

On carrying out each evaluation activity, lecturers will inform students (on Moodle) of the procedures to be followed for reviewing all grades awarded, and the date on which such a review will take place.

Those assessment activities in which there have been irregularities are not recoverable.

Bibliography

- COLOMER, Rosa, FRANQUESA, Ester (dir) (2003), Diccionari de Geografia Física, Termcat, Barcelona (disponible per consultar per internet a http://www.termcat.cat/ca/Diccionaris_En_Linia/124)
- RIBA, Oriol (dir. (1997), Diccionari de Geologia, Encyclopédia Catalana, Barcelona (disponible per consultar per internet a <http://cit.iec.cat/dgeol/default.asp?opcion=0>)
- ROSSELLÓ, Vicenç, PANAREDA, Josep Maria & PÉREZ. Alejandro (1994), Manual de Geografia Física, Universitat de València.
- STRAHLER, Arthur N. (1977), Geografía Física, Omega, Barcelona.
- STRAHLER, Arthur N. (1987), Geología Física, Omega, Barcelona.
- STRAHLER, Arthur N. & STRAHLER, Alan H. (1989 o posterior), Geografía Física, Omega, Barcelona [manual de referència].
- TARBUCK, Edward, LUTGENS, Frederick (1999), Ciencias de la Tierra, Prentice Hall, Madrid.
- Self-developed material for preparing the practices and monitoring the course, accessible via Moodle.

Software

Office and software of SIG available in the classroom of computing services

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PCAM) Field practices	13	Catalan	second semester	morning-mixed
(PCAM) Field practices	14	Catalan	second semester	morning-mixed
(PCAM) Field practices	15	Catalan	second semester	morning-mixed

(PLAB) Practical laboratories	11	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	12	Catalan	second semester	morning-mixed
(TE) Theory	1	Catalan	second semester	morning-mixed