

Introduction to Physical Geography

Code: 104236
ECTS Credits: 6

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Degree	Type	Year
2503710 Geography, Environmental Management and Spatial Planning	FB	1

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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)

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) Analyse the basic interpretative keys of the functioning of the physical environment on a planetary scale and the identification of these processes on a local scale.
6. SM07 (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.

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	SM07, SM07
Master class	20	0.8	KM07, KM08, SM06, KM07
Type: Supervised			
Seminar on the ground	25	1	CM05, KM07, KM08, SM06, CM05
Type: Autonomous			
Study and preparation of work and practical exercises	75	3	SM07, SM07

Preparation of work and practical exercises:

Autonomous work, compulsory delivery by the students following the indications of the teaching calendar. They will not change regardless of whether the teaching is face-to-face or virtual.

Theory: lecture in the classroom.

Master classes in the classroom, laboratory practices and field practices. They will be adapted, if necessary, in whatever percentage, to virtual teaching, through the various existing systems (Teams, narrated powerpoints, videos, podcasts, etc.), as has been done in the confinement period.

Field trips:

Field trips: compulsory, 1 part-time and one 3-4-day. The latter is associated with a previous task by the students consisting of a work, of a collective nature (maximum 3 people per group) and subject to evaluation, related to the place to visit. During the outing each group will present their conclusions to the rest of the class. At the beginning of the course, the teacher will explain the protocol of measures and good practices for field 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

Continuous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Field work poster	20%	0	0	CM04, CM05

Practical exams	40%	3	0.12	KM07, KM08, SM06, SM07
Theoretical exam	40%	2	0.08	KM07, KM08, SM06

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-evaluable.
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.

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, Enciclopèdia Catalana, Barcelona (disponible per consultar per internet a <http://cit.iec.cat/dgeol/default.asp?opcio=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

Language list

Name	Group	Language	Semester	Turn
(PCAM) Field practices	11	Catalan	second semester	morning-mixed
(PCAM) Field practices	12	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