

**Introduction to Physical Geography**

Code: 104236  
ECTS Credits: 6

| Degree   | Type | Year | Semester |
|--|------|------|----------|
| 2503710 Geography, Environmental Management and Spatial Planning | FB   | 1    | 2        |

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**

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**Use of Languages**

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: Yes  
Some groups entirely in Spanish: No

**Teachers**

Núria Garcia Quera  
Raquel Cunill Artigas

**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

## Competences

- Critically analyse the relationship between society and the region applying the conceptual and theoretical framework of geography.
- Demonstrate skills of self-analysis and self-criticism
- Integrate the different social and environmental disciplines with a view to describing and interpreting the spatial dynamics linked to social, economic and environmental change.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.

## Learning Outcomes

1. Demonstrate skills of self-analysis and self-criticism.
2. Differentiate the dimensions of the natural impact of anthropic actions.
3. Differentiate the geographical scale to understand the interactions between the physical and human environment.
4. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
5. Understand the main physical and environmental concepts.
6. Understand the planet earth as an integrated system of different physical dimensions.

## 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.

## Methodology

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, 2 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.

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 work                                  | 16.67 | 0.67 | 6, 5, 1, 3, 2, 4  |
| Laboratory work                             | 8.33  | 0.33 | 5                 |
| Master class                                | 25    | 1    | 6, 5, 1, 3, 2, 4  |
| Type: Supervised                            |       |      |                   |
| Seminar on the ground                       | 25    | 1    | 5                 |
| Type: Autonomous                            |       |      |                   |
| Preparation of work and practical exercises | 67    | 2.68 | 6, 5, 1, 3, 2     |

## 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.
4. Attendance at all field trips is essential to be evaluated, therefore non-attendance at any of them implies a non-evaluable.
5. The student will receive the grade of non-assessable as long as he / she has not submitted more than 30% of the assessment activities
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.

## Assessment Activities

| Title             | Weighting | Hours | ECTS | Learning Outcomes |
|-------------------|-----------|-------|------|-------------------|
| Field work poster | 20%       | 2     | 0.08 | 6, 5, 1, 3, 2, 4  |
| Practical exams   | 40%       | 4     | 0.16 | 6, 5, 1, 3, 2, 4  |
| Theoretical exam  | 40%       | 2     | 0.08 | 6, 5, 1, 3, 2, 4  |

## 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](http://www.termcat.cat/ca/Diccionaris_En_Linia/124))
- KING, C.A.M. (1984), Geografia Física, Oikos tau, Vilassar de Mar.
- LACOSTE, Yves, GHIRARDI, Raymond (1983), Geografia General, Física y Humana. Oikos tau, Vilassar de Mar.
- LÓPEZ BERMÚDEZ, Francisco; RUBIO RECIO, José Manuel & CUADRAT, Jose Maria (1992), Geografia Física. Madrid, Cátedra.
- MIRÓ, Manuel DE, DOMINGO, Montserrat (1986), Medi Natural: Relleu. Los Libros de la Frontera, Barcelona.
- 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), Geografia Física, Omega, Barcelona.
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- STRAHLER, Arthur N. & STRAHLER, Alan H. (1989 o posterior), Geografia Física, Omega, Barcelona [manual de referència].
- TARBUCK, Edward, LUTGENS, Frederick (1999), Ciencias de la Tierra, Prentice Hall, Madrid.
- Material d'elaboració pròpia per a la confecció de les pràctiques i el seguiment del curs, accessible mitjançant intranet (només a l'abast de l'alumnat que s'hagi matriculat a l'assignatura) a l'adreça: <https://cv2008.uab.cat/>

## Software

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