

Physical Geography

Code: 101590
ECTS Credits: 6

| Degree | Type | Year | Semester |
|--|------|------|----------|
| 2501002 Geography and Spatial Planning | FB | 1 | 2 |

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

Prerequisites

Be able to read with good reading comprehension and write fluently in Catalan and / or Spanish, clear grammatical 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 without interferences and know how to use conversion factors
Know how to handle changes in metric, surface, capacity and volume units
Have some basic notions about trigonometric functions (not trigonometry)

Objectives and Contextualisation

El objetivo general de la asignatura es una introducción al estudio de los diferentes elementos que componen el medio físico y de los procesos e interacciones que se producen entre ellos. Se estudia el planeta Tierra como integrante del sistema solar y como globo terráqueo y dentro del planeta, la atmósfera, la hidrosfera, la litosfera y la biosfera.

Los objetivos formativos radican en:

la adquisición de un conjunto de conocimientos básicos y fundamentados sobre cada uno de los temas tratados
el dominio de los conceptos más importantes utilizados en geografía física y de las técnicas de análisis y resolución de ejercicios prácticos.
la obtención de una visión de conjunto y unas claves interpretativas básicas del funcionamiento del medio físico a escala planetaria y la identificación de estos procesos a escala local
el logro de una buena capacidad para tratar la información geográfica, interpretarla, representarla y transmitirla
la capacitación para establecer conexiones significativas entre los diferentes aspectos temáticos del programa y con otras asignaturas

Competences

- Applying fieldwork methods and techniques in order to acquire a direct knowledge of the territory.
- Developing the specific abilities related to the knowledge of the working techniques, specially the ones related to the collection, analysis, treatment and cartographic expression of geographical information, as well as the techniques referring to the fieldwork.

- Mastering the necessary theoretical knowledge in order to pose geographical problems in an integrated way and combining a generalist approach with a specialised analysis.
- Respecting the diversity and plurality of ideas, people and situations.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- 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. Analysing the main dynamics of today's world from a geographical point of view.
2. Contrasting and comparing relevant geographical data.
3. Developing the specific abilities of fieldwork, observing and preparing the corresponding reports.
4. Engaging in geographical debates respecting the other participants' opinions.
5. Interpreting and producing cartographic documents of geographical information.
6. Obtaining, treating and analysing geographical data.
7. Posing problems about physical, economic, social and cultural diversity of territories applying knowledge of regional geography.
8. Summarising acquired knowledge about the origin and transformations experienced in its several fields of study.
9. Understanding the physical and human relationships from the direct knowledge of the territory.

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

Methodology

Theory: autonomous viewing of the presentations of each class and occasional autonomous reading of complementary texts (approximately 3 hours a week).

Practical exercises: associated to the theory and autonomous elaboration and mandatory delivery by the students following the indications of the teaching calendar.

Field trips: mandatory, 2 part-time.

Activities

| Title | Hours | ECTS | Learning Outcomes |
|--|-------|------|---------------------------|
| Type: Directed | | | |
| Preparation of work and practical exercises | 72 | 2.88 | 1, 2, 9, 3, 5, 6, 4, 7, 8 |
| Type: Supervised | | | |
| Seminar on the ground | 10 | 0.4 | 9, 3 |
| Type: Autonomous | | | |
| Stand-alone viewing of powerpoint presentations in each unit | 60 | 2.4 | 1, 2, 9, 3, 5, 6, 4, 7, 8 |

Assessment

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

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

Work on field trips of 1/2 day

To be evaluated, all the practices must be delivered within the established deadlines.

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 (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

The copying or plagiarism of material, both in the case of works and in the case of examinations, constitute a crime that will be sanctioned with a zero to the activity. In the case of recidivism, the entire subject will be suspended. Let's remember that a "copy" is considered a work that reproduces all or most of the work of one or more partners. "Plagiarism" is the fact of presenting all or part of an author's text as its own, without citing the sources, whether in paper or in digital format. See UAB documentation on "plagiarism" at:

http://wuster.uab.es/web_argumenta_obert/unit_20/sot_2_01.html

Attendance at all field trips is indispensable to be assessed, ergo assistance to any of them implies an unrepresented.

The failure to complete one of the parts to be evaluated automatically implies an unrepresented one.

Any particular case will be contemplated on the part of the teaching staff with the aim of guaranteeing an equitable treatment and avoiding the harm of the students.

Assessment Activities

| Title | Weighting | Hours | ECTS | Learning Outcomes |
|--------------------------|-----------|-------|------|---------------------------|
| Practical exam units 2-4 | 16,7% | 2 | 0.08 | 1, 2, 9, 3, 5, 6, 4, 7, 8 |
| Practical exam units 5-8 | 16,7% | 2 | 0.08 | 1, 2, 9, 5, 6, 7, 8 |

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|-----------------------------|-------|-----|------|---------------------|
| Practical exam units 9-13 | 16,6% | 2 | 0.08 | 1, 2, 9, 5, 6, 7, 8 |
| Theoretical exam unit 3 | 8,3% | 0.3 | 0.01 | 1, 2, 5, 6, 8 |
| Theoretical exam unit 4 | 8,3% | 0.3 | 0.01 | 1, 2, 5, 6, 8 |
| Theoretical exam unit 5 | 8,3% | 0.3 | 0.01 | 1, 2, 5, 6, 8 |
| Theoretical exam units 1-2 | 8,3% | 0.3 | 0.01 | 1, 2, 5, 6, 8 |
| Theoretical exam units 6-8 | 8,4% | 0.4 | 0.02 | 1, 2, 5, 6, 8 |
| Theoretical exam units 9-13 | 8,4% | 0.4 | 0.02 | 1, 2, 5, 6, 8 |

Bibliography

- COLOMER, R., FRANQUESA, E. (dir) (2003), *Diccionari de Geografia Física*, Termcat, Barcelona (disponible per consultar per internet a http://www.termcat.cat/ca/Diccionaris_En_Linia/124)
- KING, C.A.M. (1984), *Geografia Física*, Oikos tau, Vilassar de Mar.
- LACOSTE, Y., GHIRARDI, R. (1983), *Geografia General, Física y Humana*. Oikos tau, Vilassar de Mar.
- LÓPEZ BERMÚDEZ, F.; RUBIO RECIO, J.M. & CUADRAT, J.M. (1992), *Geografia Física*. Madrid, Cátedra.
- MIRÓ, M. DE, DOMINGO, M. (1986), *Medi Natural: Relleu*. Los Libros de la Frontera, Barcelona.
- RIBA, O. (dir. (1997), *Diccionari de Geologia*, Enciclopèdia Catalana, Barcelona (disponible per consultar per internet a <http://cit.iec.cat/dgeol/default.asp?opcio=0>)
- ROSSELLÓ, V., PANAREDA, J.M. & PÉREZ (1994), *Manual de Geografia Física*, Universitat de València.
- STRAHLER, A.N. (1977), *Geografia Física*, Omega, Barcelona.
- STRAHLER, A.N. (1987), *Geología Física*, Omega, Barcelona.
- STRAHLER, A.N. & STRAHLER, A. (1989 o posterior), *Geografia Física*, Omega, Barcelona [manual de referència].
- TARBUCK, E., LUTGENS, F. (1999), *Ciencias de la Tierra*, Prentice Hall, Madrid.
- Own production material for the preparation of internships and the follow-up of the course, accessible through the intranet (only available to the students that have enrolled in the course) at the address: <https://cv.uab.cat/portada/ca/>