

Geografia del canvi global

2014/2015

Code: 101587

ECTS Credits: 6

Degree	Type	Year	Semester
2501002 Geografia i ordenació del territori	OT	3	2
2501002 Geografia i ordenació del territori	OT	4	2

Contact

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Use of languages

Principal working language: anglès (eng)

Some groups entirely in English: Yes

Some groups entirely in Catalan: Yes

Some groups entirely in Spanish: Yes

Objectives and Contextualisation

Geography of Global Change is an optional second cycle course in Geography. The course has a total of 6 theory credits and includes a series of practicals.

The main objective of the course is to explore causes, processes and consequences of global environmental change in the world today, with particular emphasis on human influence. Despite being global in extent, this change may manifest itself uniquely and differently depending on the temporal and spatial scales examined. The course considers the Earth as a system, and bases everything on the concepts of Earth System Science. Despite global-scale influences, more local-scale manifestations of such processes will also be explored and examined. Global environmental change is partly driven by human activities, with sometimes unexpected and indirect consequences. Some of these global change processes have become the subject of international attention and agreements, with the aim of minimizing negative impacts.

With regard to more specific objectives, the course will be subdivided into introductory concepts and distinctions, and followed by distinct environmental spheres of impact, including the atmosphere, the oceans, and the land surfaces. With these distinctions in mind, constant exploration of more focused elements will occur, considering human population growth, urbanization, water and land use, transporation, energy and other resource consumption, pollution, and more.

Content

Block 1 Introduction to Global Change

The Earth as a System

Spatial and temporal scales (e.g. human, geologic, and all in between)

Global change vs. climate change, similarities and distinctions

Block 2 The Atmosphere

Defining the structure and composition (baseline for change)

Greenhouse gases

Industrial pollution

Geography of Global Change 2014 - 2015

Block 3 The Oceans

Role in global and climate change

Non-climatic global changes (e.g. fisheries, pollution, exotic species invasions)

Specific global change issues (monsoons, ENSO, hurricanes, etc.)

Block 4 Terrestrial Impacts

The nature of land surfaces

Specific terrestrial-based concerns (e.g. biosphere)

Causes for concern and likely futuristic developments