

GEOGRAFIA DEL CANVI GLOBAL

GUIA DOCENT

Curs 2013-14



UAB

Universitat Autònoma
de Barcelona

Guia docent

Titulacions de Grau i de Màster



1. Dades de l'assignatura

Nom de l'assignatura	Geography of Global Change
Codi	101587
Crèdits ECTS	6 crèdits
Curs i període en el que s'imparteix	2013-2014 (2n semestre)
Horari	To be announced (TBA)
Lloc on s'imparteix	TBA
Llengües	English, Spanish, Catalan

Professor/a de contacte

Nom professor/a	Graham Mortyn i Albert Pèlachs
Departament	GEOGRAFIA
Universitat/Institució	UAB
Despatx	B9-1012
Telèfon (*)	
e-mail	graham.mortyn@uab.cat ; albert.pelachs@uab.cat
Horari d'atenció	TBA

2. Equip docent

Nom professor/a	Graham Mortyn
Departament	GEOGRAFIA
Universitat/Institució	UAB
Despatx	B9-1012
Telèfon (*)	
e-mail	graham.mortyn@uab.cat
Horari de tutories	TBA



Nom professor/a	Albert Pèlachs
Departament	GEOGRAFIA
Universitat/Institució	UAB
Despatx	B9-1012
Telèfon (*)	
e-mail	albert.pelachs@uab.cat
Horari de tutories	TBA

(Afegeu tants camps com sigui necessari)
() camps optatius*

3.- Prerequisites

Successful completion of both the Physical Geography and Climatology courses.

4.- Contextualització i objectius formatius de l'assignatura

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, transportation, energy and other resource consumption, pollution, and more.



5.- Competències i resultats d'aprenentatge de l'assignatura

Competència CE1

Resultats d'aprenentatge

CE1 Integrar y transmitir los conocimientos propios de la disciplina geográfica y de aquellas con las cuales tenga afinidad.
Resultados de aprendizaje

Competència CE8 Analizar e interpretar problemas ambientales.

Resultats d'aprenentatge

CE8.4 Analizar e interpretar problemas ambientales para comprender el cambio global.

Competència CT5

Resultats d'aprenentatge

CT5 Analizar, sintetizar y razonar de forma crítica.

Competència CG2 Desarrollar estrategias de aprendizaje autónomo.

6.- Continguts de l'assignatura

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

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



7.- Metodologia docent i activitats formatives

The course content will develop along the following lines:

- lecture presentations
- readings of relevant articles, and book content
- both individual and small group activity and discussion of concepts
- question and answer / critical dialog

TIPUS D'ACTIVITAT	ACTIVITAT	HORES	RESULTATS D'APRENTATGE
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Dirigides

Lecture/discussion	22,5	Learning and comprehension of basic concepts, examples, case studies, applications, etc. This includes collective class time, plus individualized contact, usually by email, and office hours, etc.
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Supervisades

Practical guidance, support, and direction	52,5	More capability and confidence with the completion of the practical exercises associated with the course. Includes individualized contact time.
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Autònomes

Preparation and study for exam	25	Enhanced performance on required exam, greater ability to grasp material and observe/apply course concepts in everyday appreciation of global change impacts
Completion of practicals	25	Completion of practical portion of course requirement, and connection/application to theoretical concepts
Reading of class materials	25	Linking of scientific literature to major issues covered in class (both theoretical and practical portions)



8.- Avaluació

Evaluation will be based on both the theoretical (70%) and practical (30%) portions of the course. For the theoretical portion, equal weighting will be applied to both a short essay answer final exam, and research paper assignment on a global change topic of individual choice. Details on both will be provided when the course begins.

There will be no make-up exam.

ACTIVITATS D'AVALUACIÓ	HORES	RESULTATS D'APRENTATGE
Preparing/administering/marking course exam; paper grading	45/semester	Determination of both learning and teaching effectiveness on a concept-specific basis
Preparing/marking class practicals	30/semester	Evaluation of topic-specific relevance to theoretical concepts, and effectiveness at connection to material

9- Bibliografia i enllaços web

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DUARTE, C. M. (2007): El Cambio Global. Madrid, CSIC.

GORE, A. (2007): Una Veritat Incòmoda. Barcelona, Edicions 62 (hi ha també versió en castellà)

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LOVELOCK, J. (1992): Gaia. Una ciencia para curar el planeta. Barcelona, Integral.

MANNION, A.M. (1991): Global environmental change. Harlow, Essex: Longman.

MARSH, W.M. I GROSSA, J.M. Jr (1996): Environmental Geography. Science, Land Use and Earth Systems. New York: John Wiley.

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Perspectives. Cambridge, Cambridge University Press.

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TURNER, B.T.II; Clark,W.C., KATES,R.W., RICHARDS,J.F., MATHEWS,J.T. I MEYER,W.B. (eds) (1990): The Earth as transformed by human action. Cambridge: Cambridge University Press.

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