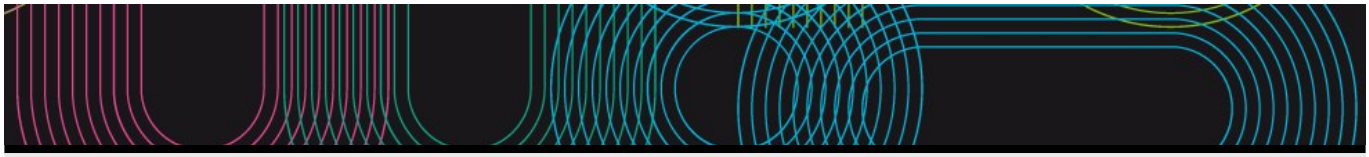

IDENTIFYING DATA				
Climate Change				
Subject	Climate Change			
Code	O01G260V01702			
Study programme	(*)Grao en Ciencias Ambientais			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	4th	1st
Teaching language	Galician			
Department				
Coordinator	Castro Rodríguez, María Teresa de			
Lecturers	Castro Rodríguez, María Teresa de Gómez Gesteira, Ramón			
E-mail	mdecastro@uvigo.es			
Web				
General description				

Competencies	
Code	
B1	(*)Capacidade de análise e síntese
B2	(*)Capacidade de organización e planificación.
B3	(*)Capacidade de comunicación oral e escrita tanto na lingua vernácula como nas extranxeiras
B5	(*)Capacidade de xestión da información
B6	(*)Adquirir capacidade de resolución de problemas
B7	(*)Adquirir capacidade na toma de decisións
B8	(*)Capacidades de traballo en equipo, con carácter multidisciplinar e nos contextos tanto nacionais como internacionais
B11	(*)Habilidades de razonamento crítico
B12	(*)Desenvolver un compromiso ético
B13	(*)Aprendizaxe autónomo
B14	(*)Adaptación as novas situacións
B15	(*)Creatividade
B19	(*)Motivación pola calidade
B20	(*)Sensibilidade hacia temas medioambientais
B21	(*)Capacidade de aplicalos coñecementos teóricos en casos prácticos
B22	(*)Capacidade de comunicarse con persoas non expertas na materia
B23	(*)Capacidade para entender a lenguaxe e propostas doutros especialistas
B24	(*)Capacidade de autoevaluación
C4	
C5	
C10	
C22	

Learning outcomes	
Expected results from this subject	Training and Learning Results

Development of the capacity to transmit information, ideas and defend arguments so much in front of a skilled public as no.	B1 B2	C4 C5
Development of the capacities of management of the information, analysis and synthesis of the results, resolution of problems and taking of decisions.	B3 B5	C10 C22
Development of the capacities of autonomous work and in team, of self-criticism, ethical commitment, creativity, sensitivity in front of the environmental problems and motivation by the quality.	B6 B7 B8	
Develop the capacity to integrate the experimental evidences in the theoretical knowledges and for the qualitative and quantitative interpretation of the results.	B11 B12	
Know and comprise the climatic scales and the concepts related with the climate and the global change-	B13 B14 B15 B19 B20 B21 B22 B23 B24	

Contents

Topic	
Block I: climatic Change in the atmosphere and ocean Fear 1. Climate happened in the Earth	Definition of climate. Climatic system. Reconstruction of the climate. Climatic variability. Characterisation of the climate us distinct periods of the Earth.
Subject 2. Effect of the current climatic change in the atmosphere.	Evolution of the global half temperature in the 20th century and XXI. Tendencies. Evolution of the cover of ice in the different regions of the planet. Tendencies. Variability of the atmospheric humidity. Tendencies. Evolution of global clouds coverege. Variations in the atmospheric circulation.
Subject 3. Effect of the current climatic change in the ocean.	Changes of the temperature and salinity to scale global. Changes in the level of the mar. Changes biochemical.
Block II: climatic Change and biodiversity Subject 4. Effect of the climatic change in the biodiversityvegetal	Evidences of the climatic change and his characteristics. Main climatic elements fundamental to the development and vegetal growth. Influence of the meteorological parameters on the periodic phenomena in the vegetal Effects on the agriculture.
Subject 5. *Mitigación And adaptation	Resources to improve the current energetic system. Management of forest resources and of crops.

Planning

	Class hours	Hours outside the classroom	Total hours
Master Session	26	44.2	70.2
Seminars	10	20	30
Short answer tests	2	18	20
Troubleshooting and / or exercises	4	25.8	29.8
*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.			

Methodologies

	Description
Master Session	In the masterclasses will explain the own concepts of each subject. Like material of support will use the available technology: projection, blackboard, etc. Summary subjects will dump in the platform Fear of *Teledocencia of the University of Vigo (http://faitic.uvigo.es).
Seminars	Analysis of temporary series (perpetual years, variability *interanual, anomalies, tendencies□) of distinct variables so much atmospheric how oceanic (elevation of the tide, temperature of the air, temperature of the ocean, salinity, atmospheric models like *NAO, *EA□) Resolution of exercises and practical cases. Analysis of documentation on the subject and of audiovisual.

Personalized attention

Methodologies	Description
Master Session	Through the platform "FAITIC" the student can access so much to the content of each one of the subjects that integrate the matter, like the different activities proposed. The personalised attention will take place during tutorials of the professors/the and in the masterclasses and seminars. Turorials: Monday: 16:00-18:00 Tuesdays: 16:00- 18:00
Seminars	Through the platform "FAITIC" the student can access so much to the content of each one of the subjects that integrate the matter, like the different activities proposed. The personalised attention will take place during tutorials of the professors/the and in the masterclasses and seminars. Turorials: Monday: 16:00-18:00 Tuesdays: 16:00- 18:00

Assessment

	Description	Qualification	Training and Learning Results	
Short answer tests	Questions on the *temario	60	B1 B2 B3 B5 B11 B13 B19 B20 B23	C10
Troubleshooting and / or exercises	Proposal of resolution of practical cases and exercises posed in the seminars	40	B1 B2 B3 B5 B6 B7 B8 B11 B12 B13 B14 B15 B19 B21 B22 B23 B24	C4 C5 C22

Other comments on the Evaluation

Attendance is compulsory lectures and especially the seminars.

To pass the course, students must have passed the two parts of the same, both short-answer tests the presentation and performance of work seminars and individual activities. Students just cause can not attend classes must justify properly. The evaluation will be conducted with additional work that will propose him / her second teacher the case.

Examinations:DAY: 20 January 2016 HOUR: 10 h.DAY: 5 July 2016 HOUR: 16 h.End of career: 1 October 2016 Hour: 16 h.

Sources of information

Antón Uriarte Centolla, **Historia del Clima de la Tierra**, EuskoJaurlaritzarenArgitalpenZerbituNagusia,

Intergovernmental Panel on Climate Change, **Climate change 2007: the physical science basis**, Contribution of Working Group 1 to the Fourth Assessment Report of the Intergovernmental Panel on C,

Elias F. & Castellví F., **Agrometeorología**, Mundi Prensa,

Mavi H.S. & Tupper G.J., **Agrometeorology.**, Food Products Press.,

Cambio climático y biodiversidad, IPCC,

Recommendations

Subjects that are recommended to be taken simultaneously

Bioclimatology/O01G260V01909
Physical Climatology/O01G260V01901