Teaching Guide				
Identifying Data				2019/20
Subject (*)	Physical Geography		Code	610G02006
Study programme	Grao en Bioloxía			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	2nd four-month period	First	Basic training	6
Language	Spanish			
Teaching method	Face-to-face			
Prerequisites				
Department	Física e Ciencias da Terra			
Coordinador	Santos Fidalgo, Luisa	E-mail	luisa.santos@udc.es	
Lecturers	Lado Liñares, Marcos Sanjurjo Sanchez, Jorge Santos Fidalgo, Luisa	E-mail	marcos.lado@udc.es jorge.sanjurjo.sanchez@udc.es luisa.santos@udc.es	
Web				
General description	General and global study of the main elements of Geography in Nature, their internal correlations and significant elements, with an integral introduction to the study of relief, climate, water, biosphere and landscape.			

Study programme competences	
Code	Study programme competences
A6	Catalogar, avaliar e xestionar recursos naturais.
A22	Describir, analizar, avaliar e planificar o medio físico.
A23	Avaliar o impacto ambiental. Diagnosticar e solucionar problemas ambientais.
A30	Manexar adecuadamente instrumentación científica.
A32	Desenvolverse con seguridade no traballo de campo.
B1	Aprender a aprender.
B2	Resolver problemas de forma efectiva.
B3	Aplicar un pensamento crítico, lóxico e creativo.
B4	Traballar de forma autónoma con iniciativa.
B5	Traballar en colaboración.
B6	Organizar e planificar o traballo.
B7	Comunicarse de maneira efectiva nunha contorna de traballo.
B8	Sintetizar a información.
B9	Formarse unha opinión propia.
B10	Exercer a crítica científica.
B11	Debater en público.
B12	Adaptarse a novas situacións.
B13	Comportarse con ética e responsabilidade social como cidadán e como profesional.

Learning outcomes	
Learning outcomes	Study programme competences

Acquisition of skills for the use, analysis and appraisal of the acquired knowledge in the practical context required by professional activities.	A6 A22 A23 A30 A32	B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13	
To work with autonomy and initiative, retrieving useful information from bibliographic references and other sources.	A6 A22 A23 A30 A32	B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13	
Development of skills for interpretation and synthesis of data supplied by references, different types of maps and photo interpretation.	A6 A22 A23 A30 A32	B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13	

Contents	
Topic	**Sub-topic**
I. INTRODUCTION	1. Physical Geography: concept, division and correlation with other sciences. 2. The Earth System and subsystems 3. The Earth Surface: Global Topography

II. THE ATMOSPHERE AND THE HYDROLOGIC SYSTEM OF THE EARTH	4. Composition and structure of the atmosphere 5. Energy of the atmospheric system 6. Winds and atmospheric movement 7. Ocean-atmospheric interaction. Oceanic circulation 8. Atmospheric water and water balance 9. Types of precipitation, air masses and weather fronts 10. Climatic zonation of the Earth 11. Climatic change
III. THE BIOSPHERE	12. Climate, soil, flora and fauna 13. Soil formation, properties and classification 14. Biogeographic processes. Phytogeography and zoogeography
IV. LANDSCAPE AND RELIEF EVOLUTION	15. Weathering and slope processes 16. Fluvial and lacustrine Systems 17. Coastal Systems 18. Karst Systems 19. Glacial Systems 20. Desert Systems

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student?s personal work hours	Total hours
Guest lecture / keynote speech	B1 B3	28	70	98
Laboratory practice	A30	10	5	15
Supervised projects	A6 A22 A23 B2 B4 B5 B6 B7 B9 B10 B11 B12 B13	8	16	24
Field trip	A32	5	5	10
Objective test	B8	2	0	2
Personalized attention		1	0	1
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies	
Methodologies	Description
Guest lecture / keynote speech	Theoretical and basic concepts will be acquired in lectures.
Laboratory practice	Practices are a basic complement of theoretical lectures to deal with the learning of basic methods and techniques for working with geographical data. The aim is that the students develop skills for interpretation, synthesis and analysis supplied by references, maps and photogeology, based on the contents of the subject. Moreover, it is intended to transmit the basic knowledge for the use of geographical information systems and spatial analysis using software (Geographic Information Systems).
Supervised projects	They will consist on the development of themes and individual or group reports, proposed by the Professor, about several aspects of the subject. The following is required: searching and dealing with data, summarizing main ideas, work division, group discussion and exposition of reports. Moreover, the students can voluntarily participate in learning service (ApS) activities. The results of the activities will be assessed. The Professor will continuously supervise the development of the different activities.
Field trip	It is a complement of the other activities.
Objective test	Eliminatory tests of the theoretical contents of the subject that will consist on short of test questions and comments or identification of diagrams and pictures.

Personalized attention

Methodologies	Description
Laboratory practice Supervised projects Field trip	The personalized attention described for these methodologies is understood as profesor-student face-to-face work, and requieres student participation. These activities will be programmed by the teachers throughout the year according to the subject work plan. Personalized advice may be also received via online, through e-mail, virtual platform,... Part-time students may also perform these works and submit them to the teachers for their assessment. Part-time students can also receive personalized assistance using both face-to-face and virtual tutorial sessions.

Assessment			
Methodologies	Competencies	Description	**Qualification**
Laboratory practice	A30	Avaliación continua.	20
Supervised projects	A6 A22 A23 B2 B4 B5 B6 B7 B9 B10 B11 B12 B13	Traballos elaborados polos alumnos e presentación dos mesmos.	30
Objective test	B8	Cuestionarios eliminatorios dos contidos teóricos da asignatura.	50

Assessment comments
Attendance to practical lectures (including the submission of requested exercises) and submission of seminar reports are required conditions to be evaluated. Practical work and seminar reports will account for 50% of the final score (practical works: 20% and seminar reports: 30%). Objective tests will account for 50% of the score. To pass the course, 5 points out of 10 should be obtained in each test. In addition to this, the submission of the seminar reports, as well as the active participation in them, attendance to tutorial sessions, fieldtrip, AEMET visit, etc., will also be considered in the final score. Students who do not pass the partial exemption exams will be evaluated in the official tests of June and July. The percentages of the different activities on the final grade will be the same as explained above. For all the activities, the score will be maintained, although students can submit a new report to get a higher score than the previously obtained. To qualify as NOT PRESENTED, the students should not have participated in more than 40% of the evaluable activities. All prior observations apply to part-time students. Exceptional cases: when a student could not do all the evaluation activities due to justified causes, the Professors will take the actions they consider adequate to assess the work of the student. Students who pass the course in the first opportunity will have priority to be granted with Honors.

Sources of information	
Basic	De Blij, H.J., Muller, P.O. y Williams, R.S. 2004. Physical Geography. The global environment. Oxford University Press, Oxford.López Bermúdez, F., Rubio Recio, J.M. y Cuadrat, J.M. 1992. Geografía Física. Cátedra, Madrid.Strahler, A.N. y Strahler, A.H. 1994. Geografía Física. Omega, Barcelona.
Complementary	Briggs, D. y Smithson, P. 1992.Â Fundamentals of Physical Geography.Â Routledge, LondonGabler, R.E., Sager, R.J., Wise, D.L. y Petersen, J.F. 1999.Â Essentials of Physical Geography.Â Thomson Learning, London.Strahler, A.N. y Strahler, A.H. 2002.Â Physical Geography: science and systems of the human environment.Â John Wiley and Sons, New York.Hamblin, W.K. y Christiansen, E.H. 2001.Â Earth?s Dynamic Systems.Â Prentice Hall, London.Skinner, B. J. & Porter, S. C. 1995.Â The Dynamic Earth. An Introduction to Physical Geology. John WileyÂ andÂ Sons, New York.Briggs, D. y Smithson, P. 1992. Fundamentals of Physical Geography. Routledge, LondonGabler, R.E., Sager, R.J., Wise, D.L. y Petersen, J.F. 1999. Essentials of Physical Geography. Thomson Learning, London.Strahler, A.N. y Strahler, A.H. 2002. Physical Geography: science and systems of the human environment. John Wiley and Sons, New York.Hamblin, W.K. y Christiansen, E.H. 2001. Earth?s Dynamic Systems. Prentice Hall, London.Skinner, B. J. & Porter, S. C. 1995. The Dynamic Earth. An Introduction to Physical Geology. John Wiley and Sons, New York.

Recommendations
Subjects that it is recommended to have taken before
Geology/610G02004
Subjects that are recommended to be taken simultaneously
Subjects that continue the syllabus
Ecology I: Individuals and Ecosystems/610G02039 Ecology II: Populations and Communities/610G02040 Edaphology/610G02045
Other comments
Students in Physical Geography should have passed the corse "Geology", compulsory of the first semester. Attendance to theoretical lectures is recommended. English language knowledge is recommended (medium level). Writting, summarizing, and submitting seminar works is required, as well as the basic user knowledge of basic software applications such as internet tools, word processor, presentation software, etc.