



Teaching Guide

| Identifying Data | | | | | 2021/22 |
|----------------------------|--|---------------|--|---------|---------|
| 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 | | | | |
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| 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. | | | | |



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| Contingency plan | <p>1. Changes in contents No changes will be made.</p> <p>2. Methodologies *Teaching methodologies will be maintained Most of the teaching methodologies that will have to be changed to telematics are maintained: Keynote lectures Practical works Small Teaching group reports (seminars)</p> <p>*Teaching methodologies that are modified Field trips: Voluntary field trips will be suspended Objective test (no elimination questionnaires, evaluation of this knowledge will be incorporated in the continuous evaluation of practices and seminars and in the final evaluation)</p> <p>3. Mechanisms for personalized attention to students E-mail: Daily, for consultations, to request tutorials and to follow up on tutored work. Moodle: Daily. They will have specific forums associated with the different activities for consultations, as well as Tasks and other activities for the development of the contents of the subject. Teams: Synchronous sessions (video conferences) weekly in the time slots assigned in the class schedules of the faculty (both for theoretical content and for monitoring and support of practices and supervised work) and asynchronous (messaging) daily.</p> <p>4. Modifications in the evaluation Practices (30%): Continuous evaluation, completion of the practices and delivery of the requested exercises. Small Teaching groups (seminars) (40%): Continuous assessment, elaboration of two papers and delivery through Moodle. Theoretical content (30%): Evaluation through Teams and Moodle. Other activities (1.5 points or more): Active participation in the different programmed activities (Forums, Headings, etc.). *Evaluation observations:</p> <p>5. Modifications of the bibliography or reference website They didn't happen.</p> <p>Other observations: -This subject is taught in the First and Second Semesters, so it could be the case that in the Second Semester the Teaching Modality is different to the one in the first. -Modification in case the capacity of the classroom assigned for the subject is exceeded The modification is the allocation of two or more classrooms to the subject, and teaching online using TEAMS for the students who are not in the classroom with the teacher.</p> |
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| Study programme competences | |
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| Code | Study programme competences |
| A6 | Catalogar, avaliar e xestionar recursos naturais. |
| A22 | Descibir, 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. |



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| 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 |



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| Development of skills for interpretation and synthesis of data supplied by references, different types of maps and photo interpretation. | A6 | B1 |
| | A22 | B2 |
| | A23 | B3 |
| | A30 | B4 |
| | A32 | B5 |
| | | B6 |
| | | B7 |
| | | B8 |
| | | B9 |
| | | B10 |
| | | B11 |
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| | | B13 |

| Contents | |
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| 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 | <p>The personalized attention described for these methodologies is understood as profesor-student face-to-face work, and requires student participation. These activities will be programmed by the teachers throughout the year according to the subject work plan.</p> <p>Personalized advice may be also received via online, through e-mail, virtual platform,...</p> <p>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.</p> |

| 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 eliminatórios dos contidos teóricos da asignatura. | 50 |

| Assessment comments |
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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. This call will be evaluated in the same way (percentages), by examining the theoretical and practical contents and submitting the seminar reports. 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.

Fraud in tests or evaluation activities, once verified, will directly imply the failure grade "0" in the matter at the corresponding call.

Sources of information

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| 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. Fundamentals of Physical Geography. Routledge, London.Gabler, 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 & Sons, New York.Briggs, D. y Smithson, P. 1992. Fundamentals of Physical Geography. Routledge, London.Gabler, 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 course "Geology", compulsory of the first semester. Attendance to theoretical lectures is recommended. English language knowledge is recommended (medium level). Writing, 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. Green Campus Science Faculty Program To contribute to achieve an immediate sustainable environment and comply with point 6 of the "Environmental Declaration of the Faculty of Sciences (2020)", the documentary works carried out in this subject:- They will be requested mostly in virtual format and electronic form.- If it is printed: - Plastics will not be used. - Double-sided prints will be made. - Recycled paper will be used. - Drafts will be avoided.

(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.