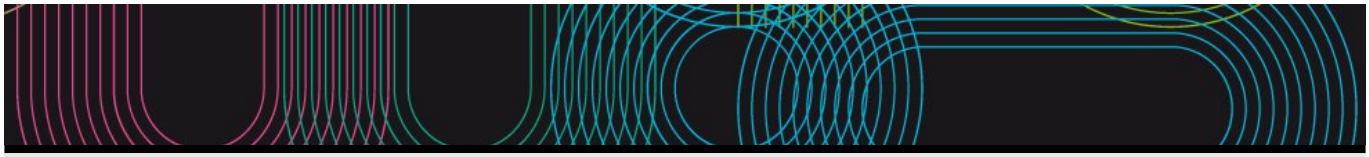
Universidade Vigo

Subject Guide 2020 / 2021



IDENTIFYING DATA				
Geology: Geology 2				
Subject	Geology: Geology 2			
Code	V10G061V01108			
Study programme	(*)Grao en Ciencias do Mar			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	2nd
Teaching language	Spanish			
Department				
Coordinator	Rubio Armesto, María Belén			
Lecturers	Bernabéu Tello, Ana María Gago Duport, Luís Carlos Lago Cameselle, Alejandra Marino , Gianluca Pérez Arlucea, Marta María Rubio Armesto, María Belén			
E-mail	brubio@uvigo.es			
Web	http://http://mar.uvigo.es/index.php/es/alumnado-actual/asignaturas			
General description	Comprises the understanding of the scientific principles that influence our planet, its evolution, its formations, the atmosphere and the oceans. It is about acquiring basic knowledge of geological processes that act in particular on the earth's surface, the so-called external geological processes.			

Competencies	
Code	
A1	Students have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study
A5	Students have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy
B1	Know and use vocabulary, concepts, principles and theories related to oceanography and apply everything learned in a professional and/or research environment.
B4	Manage, process and interpret the data and information obtained both in the field and in the laboratory.
C1	know at a general level the fundamental principles of sciences: Mathematics, Physics, Chemistry, Biology and Geology.
C12	Acquire knowledge about processes and products related to internal and external geological cycles.
D1	Develop the search, analysis and synthesis of information skills oriented to the identification and resolution of problems.
D5	Sustainability and environmental commitment. Equitable, responsible and efficient use of resources.

Learning outcomes				
Expected results from this subject	Training and Learning Results			
Identify the main mineral constituents and biological in sediments and sedimentary rocks by observations "de visu" in field and laboratory.	A1	B1	C1	D1
Know and differentiate the external geological agents and their effects.	A5		C1 C12	
Recognize the relief forms		B1		
Handle the systems of cartographycal maps		B4		
Handle the principles and the basic instruments of positioning and georeference	A1	B4	C12	D1
Look for and handle specific information.	A5			D1 D5

Contents

Topic	
The Earth as an study object	Evolution of the Earth. The geological and petrologic cycle
The systems of the Earth	The systems of the Earth: atmosphere, hydrosphere, Hydrologic cycle. Karstic systems and underground water.
External Processes	Weathering and soils Formation of sediments Sediments: erosion, transport and sedimentatón. Diagenesis and sedimentary rocks
Geological processes in continental environments	Desert, glaciar, fluvial and lacustrian sedimentary environments
Geological processes in marine environments	Coastal zone: agents and processes Marine and oceanic areas: geomorphologic features and sedimentary environments.

Planning

	Class hours	Hours outside the classroom	Total hours
Laboratory practical	10	12	22
Seminars	7	10	17
Studies excursion	8	4	12
Lecturing	20	60	80
Report of practices, practicum and external practices	0	12	12
Objective questions exam	0	3	3
Essay questions exam	2	0	2
Essay	0	2	2

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

	Description
Laboratory practical	Reconocimiento de rocas sedimentarias Sistemas de representación (mapas de isolíneas y cálculo de volúmenes) Cortes geológicos
Seminars	Procesos de erosión y transporte de sedimentos. Determinación del contenido en carbonato cálcico en sedimentos Interpretación geológica con Google Earth
Studies excursion	Inspección geológica en una salida de campo el largo del itinerario : Vigo-Ramallosa-Baiona Se trata de reconocer el control que ejerce la geología y la dinámica marina y fluvial en la morfología de la costa. Reconocimiento de los principales tipos de rocas y de los principales ambientes sedimentarios; mecanismos de actuación durante el Cuaternario. Potenciales riesgos geológicos.
Lecturing	Clases centradas en contenidos teóricos con predominio de la exposición, pero fomentando la participación del estudiante mediante preguntas

Personalized assistance

Methodologies	Description
Seminars	The students could attend personal tutorials to solve doubts and/or uncertainties, which will mainly take place during the timetables indicated. To optimize the time, it is necessary the student contact the teacher in advance.
Studies excursion	The students could attend personal tutorials to solve doubts and/or uncertainties, which will mainly take place during the timetables indicated. To optimize the time, it is necessary the student contact the teacher in advance.
Lecturing	The students could attend personal tutorials to solve doubts and/or uncertainties, which will mainly take place during the timetables indicated. To optimize the time, it is necessary the student contact the teacher in advance. B. Rubio schedule: Monday, Wednesday and Friday from 12:00 to 14:00 h.
Laboratory practical	The student that wish it will be able to *acudir the *titorías customized to resolve doubts, mainly us time that indicate . To optimise the time, is necessary that the student contact with the in advance sufficient professor
Tests	**Description**
Report of practices, practicum and external practices	It corresponds to the final work that delivers the student and collects the work realized during them practical.

Assessment

	Description	Qualification	Training and Learning Results			
Seminars	It contemplates the delivery of the questions or resolution of the exercises posed in the seminars.	10	A1	B1	C1	D5
Studies excursion	It values the assistance to the routes of field programmed, and the corresponding presentation of a report or questionnaire on the contents evaluated in the exit.	5		B4	C1 C12	
Report of practices, practicum and external practices	It will qualify the assistance and the correct realization of the practices of laboratory that have a mandatory character, in addition to the quality of the report	10	A1	B4		
Objective questions exam	It comprises the answers of the quizzes	5	A1	B1	C1 C12	D1
Essay questions exam	They will done in an only exam at the end of the course. It can contemplate any aspect of the theoretical lessons as well as in practical or seminars activities.	70	A1 A5	B1	C1 C12	

Other comments on the Evaluation

The quiz of the platform FAITIC and the practical lessons and seminars are compulsory. The minimum qualification of the theoretical examination will be of 3,5 to be able to compensate with the others qualifications obtained in practices and seminars.

Date, time and place of exams will be published in the official web of Marien Sciencies Faculty: http://mar.uvigo.es/index.php/en/alumnado-actual-2/examenes-3

Students are strongly requested to fulfil a honest and responsible behaviour. It is considered completely unacceptable any alteration or fraud (i.e. copu or plagiarism) contributing to modify the level of knowledge and abilities acquired in exams, evaluations, reports, or any kind of teacher´s proposed work. F*raudulent behaviour may cause failing the course for a whole academic year. An internal dossier of these activities will be built and, when reoffending, the university rectorate will be asked to open a disciplinary record.*

Sources of information

Basic Bibliography

Anguita, F y Moreno, F., **Procesos Geológicos Externos y Geología Ambiental**, Rueda,

Pozo et al., **Geología Práctica**, Pearson,

Tarbuck, E.J. y Lutgens, F.K, **Ciencias de la Tierra. Una introducción a la geología física. 8ª ed.**, Pearson,

Azañón et al., **Geología Física**, Paraninfo,

Complementary Bibliography

Recommendations

Subjects that continue the syllabus

Coastal and marine sedimentary habitats/V10G061V01207

Subjects that it is recommended to have taken before

Geology: Geology 1/V10G061V01103

Contingency plan

Description

=== EXCEPTIONAL MEASURES SCHEDULED ===
In front of it uncertain and unpredictable evolution of the sanitary alert caused by the COVID- 19, the University establishes join extraordinary planning that will actuate in the moment in that the administrations and the institution determine it attending to criteria of security, health and responsibility, and guaranteeing the teaching plan in a non-presential scenary. These already scheduled measures guarantee, in the moment that was prescriptive, the development of the teaching of a way but agile and effective when being known beforehand (or with a wide advance) pole students and the teaching staff through the tool normalized and institutionalized of the teaching guides DOCNET.

=== ADAPTATION OF The METHODOLOGIES ===
Teaching Methodologies that keep
The lectures will be in a virtual way through remote campus

Teaching Methodologies that modify

For the field contemplate two possible options, depending of the confinement level was total or partial.

(1) Option. Walking around campus. Geomorphologic description of the Ría de Vigo, since the forest park. Measurements of direction and dip with the compass.
(2) Option. Virtual tour using Google Earth and geological maps (MAGNA). Explanation of the tectonic and lithologic units of the NW and the coastal geomorphology. Analysis of weathering processes trough photographies. Video-tutorials about direction and dip measurements.

Regarding laboratory sessions:

The practice of recognition of sedimentary rocks will do virtually by using photographs of the collection of rocks of the Marine Sciences Faculty

The other two practices do not change.

Regarding the seminars will adapt to the virtual way. The seminars 1 and 3, that do not require the use of specific laboratory, will be the same. The seminar 2 will develop using a group of synthetic data from which the students will obtain the determination of calcium carbonate
Mechanism of no presential of attention to the students
All the mentoring will be concerted with the teaching staff and they will take place in a virtual mode
Modifications (proceed) of the contained to impart
They do not change

Additional Bibliography to facilitate the learning

* Other modifications

=== ADAPTATION OF The EVALUATION ===
Proofs already done
Test Seminars: [previous Weight 10%] [Weight Proposed 20%]
Practical Proof: [previous Weight 10%] [Weight Proposed 20%]
Test Field: [previous Weight 5%] [Weight Proposed 10%]
Test Questionnaires: [previous Weight 5%] [Weight Proposed 10%]

...

Pending proofs that keep
Test: [previous Weight 70%] [Weight Proposed 40%]
...

* Proofs that modify
[Test of short questions] => [test online]

* New proofs
We will include the participation in forums that can be evaluated for adjustment of the final mark.

* additional Information