Universitat Autònoma de Barcelona

2019/2020

The Life on Earth

Code: 101030
ECTS Credits: 6

Degree	Type	Year	Semester
2500254 Geology	FB	1	1

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Teachers

Enric Vicens Batet

Prerequisites

Although there are no prerequisites, it is recommended the student to be skilled in basic knowledge of Biology.

Objectives and Contextualisation

Contextualization: This subject provides an essential introduction to the compulsory basic subject "Biology". It is taught in the first year of the Geology Degree.

Objectives: To provide a solid foundation in Biology. To understand the principles and concepts of evolution, ecology and biogeography. To be familiar with the organisational levels of living organisms and the characteristics of the main taxonomical groups.

Competences

- Learn and apply the knowledge acquired, and use it to solve problems.
- Obtain information from texts written in other languages.
- Suitably transmit information, verbally, graphically and in writing, using modern information and communication technologies.
- Use concepts from biology when solving problems in geology.
- Work independently.

Learning Outcomes

1. Apply concepts from biology to understand the levels of organisation of living beings, ecology, biogeography and evolution.
2. Learn and apply the knowledge acquired, and use it to solve problems.
3. Obtain information from texts written in other languages.

4. Suitably transmit information, verbally, graphically and in writing, using modern information and communication technologies.
5. Work independently.

Content

- Introduction. Life.

- The cell. Structure. Function. Energy flux.

- Reproduction. Heritage.

- Tissues. Organs. Systems. Organisms.

- Anatomy. Physiology. Morphology. Growing. Skeleton.

- Evolution. Diversity. Systematics. Taxonomy.

- Ecology. Environment. Populations. Communities. Ecosystems.

- Biogeography.

- Organisms: Bacteria. Archaebacteria. Eukaryotes.

- Organisms: Protists.

- Organisms: Plants. Fungi. Animals.

Methodology

Several teaching-learning strategies will be used to help students reach the objectives of the subject.

Lectures: Students will acquire the necessary scientific-technical knowledge for the course in the lectures, which will be taught in one-hour sessions (a total of two hours per week).

Laboratory classes: The practical classes consist of observing the distinct groups of organisms studied in the theory classes. Laboratory classes will take place in 2 hour-long sessions per week at the Palaeontology laboratory

Exercises carried out in laboratory classes or as independent work will be submitted on the dates determined by the lecturers.

Autonomous activities: The activities mentioned above must be complemented with the personal work and study from the student.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Laboratory work	26	1.04	1, 2, 3, 4, 5
Lectures	26	1.04	1, 2, 3, 4, 5
Type: Supervised			
Exercises	15	0.6	1, 2, 3, 4, 5

Type: Autonomous			
Personal study and work	75	3	1, 2, 3, 4, 5

Assessment

All students registered on this subject (whether for the first time or not) are required to carry out the same activities (lectures and laboratory classes) and will be subject to the same assessment criteria.

Assessment for this subject is continuous throughout the course and is based on the following elements:

1. Exams. Three exams, representing-jointly-75% of the final grade. These exams will take place during the course and will include all content covered in lectures and practical classes. Depending on the availability of time, each exam may be divided into two parts, which will be taken on separate days (these dates will be established by the teaching team).

A minimum grade of 4 is required in each exam (and for each part) in order for an average overall grade to be calculated with the other course grades. Students who have obtained a grade lower than 4 must present themselves for re-assessment of the exams

The students who pass all three exams may take the re-assessment of the first, second and/ or third exam at the end of the course to improve their final grade. The mark used to calculate the final grade will be that obtained in re-assessment.

2. Laboratory classes. The exercises/ tests carried out in laboratory classes represent 25% of the final grade. Attending laboratory classes is mandatory. Students attending less than 80% of the practical sessions will not be eligible for assessment and will be awarded the grade of "Not Assessable" (0) for this activity. There is no re-assessment for the practical exercises.

To pass the subject it will be necessary to obtain a minimum overall grade of 5 points.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Continuous assessment of exercises and practical classes	25 %	0	0	1, 2, 3, 4, 5
Exams	75 %	8	0.32	1, 2, 3, 4, 5

Bibliography

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