

Course Unit	Biodiversity	Field of study	Natural Sciences
Bachelor in	Environmental Education	School	School of Education
Academic Year	2021/2022	Year of study	2
Type	Annual	Semester	-
Level	1-2	ECTS credits	8.0
Code	9082-620-2001-00-21		
Workload (hours)	216	Contact hours	T - , TP 54, PL 18, TC - , S - , E - , OT 18, O -

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Maria Conceição Costa Martins

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. Understand that the diversity of living beings reflects the existence of many differences, but also of many similarities between them.
2. Understand the concept of species and their importance in systematics.
3. Discuss different theories about the origin of living beings and of the evolution of species.
4. Distinguish the main taxonomic groups that are grouped living beings.
5. Understand the importance of biodiversity on our planet.
6. Recognize the major threat to biodiversity factors.
7. Identify the most important groups and species of biological diversity in Portugal.

Prerequisites

Before the course unit the learner is expected to be able to:
No pre-requisites

Course contents

1-Diversity and unity of Life. 2-Study of the major taxonomic groups. 3-Biodiversity and nature conservation.

Course contents (extended version)

1. Diversity and unity of Life
 - Classification of living organisms
 - Origin and evolution of living beings
 - Classical theories about the evolution of species and Evolutionism
2. Study of the major taxonomic groups
 - Monera, Protista e Fungi Kingdom
 - Plant and Animalia Kingdom
 - Diversity and ecological relevance of Traqueophytes
 - Diversity and ecological relevance of Chordats
3. Biodiversity and nature conservation
 - Biodiversity in Portugal
 - Biodiversity conservation relevance
 - Threats to biodiversity
 - Institutions and biodiversity protection instruments

Recommended reading

1. Bencatel, J., Álvares, F., Moura, A. E., & Barbosa, A. M. (eds.) (2017). Atlas de mamíferos de Portugal. Universidade de Évora.
2. Eiras, J. (2010). Charles Darwin (1809/2009). Evolução e biodiversidade. Editora da Universidade do Porto.
3. Figueiró, A. (2015). Biogeografia: dinâmicas e transformações da natureza. Oficina de Textos.
4. Secretariado da Convenção sobre Diversidade Biológica (2014). Panorama da biodiversidade global. CDB. www.cbd.int/GBO4.
5. Sociedade Portuguesa de Botânica (2014). Flora-On: Flora de Portugal interactiva. SPBotânica. www.flora-on.pt.

Teaching and learning methods

The course has strong component reflective, interactive and practical. Some classes will have a theoretical/illustration character, where the presentation of content is made by the teacher, but there are also classes with debates and discussion of current topics on the study and preservation of Biodiversity. In the practical classes, laboratory and field research techniques will be used.

Assessment methods

1. Continuous assessment - (Regular, Student Worker) (Final)
 - Intermediate Written Test - 70% (Evaluation of the theoretical component will be done through 2 tests, both with equal weight)
 - Laboratory Work - 30% (Written reports on the practical lessons)
2. Exam - (Regular, Student Worker) (Supplementary, Special)
 - Final Written Exam - 70% (Concerns only the theoretical component and will be run through a test writing)
 - Practical Work - 30% (Corresponding to the assessment of the practical component obtained by frequency)

Language of instruction

Portuguese, with additional English support for foreign students.

Electronic validation

Maria Conceição Costa Martins	Delmina Maria Pires	Paulo Miguel Mafra Gonçalves	Carlos Manuel Costa Teixeira
26-10-2021	26-10-2021	29-10-2021	24-11-2021