

Course Unit	Integrated Development and Nature Conservation	Field of study	-		
Master in	Environmental Education	School	School of Education		
Academic Year	2023/2024	Year of study	1	Level	2-1
Type	Semestral	Semester	2	ECTS credits	9.0
Code	6083-766-1201-00-23				
Workload (hours)	243	Contact hours	T -	TP 54	PL -
			TC 18	S -	E -
			OT 18	O 90	

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) Adorinda Maria Rodrigues Pereira S. Gonçalves, Amílcar António Teiga Teixeira, Raphael de Vica Ferreira da Costa, Fernando Jorge Veloso Miranda

Learning outcomes and competences

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

1. Knowing the conditions for Sustainable Development.
2. Show an overview of the main measures of Conservation of Nature.
3. Understand the natural and social phenomena associated with ecosystem change.
4. Identify the environmental impacts resulting from intensive exploitation of natural resources.
5. Understanding the role of environmental educators in the dissemination of good practice in integrated development and conservation.
6. Discuss the importance of different environmental technologies in the production of renewable energies and in the regeneration of degraded resources.

Prerequisites

Before the course unit the learner is expected to be able to:
They are not required prerequisites

Course contents

1. Development 2. Nature Conservation 3. Effects of Human Activity on natural systems 4. Intensive exploitation of natural resources 5. Education for Sustainability

Course contents (extended version)

1. Sustainable Developmen
 - Environment and Development
 - Human behaviors and ecological footprint
 - Sustainable Consumption
2. Nature Conservation
 - Economics of Nature Conservation / Degradation
 - Ecological Consciousness and geosciences
 - Geodiversity and his many contributions
 - Geoconservation and their strategies
3. Effects of human activities on natural systems
 - Technologies for renewable energy production (hydro, solar, wind and nuclear)
 - Effects of degradation of natural systems on human societies
 - Economic balance of the degradation of ecosystems
 - Energy efficiency (production, distribution, consumption) and diversification of primary sources
 - Territorial planning: design of cities and widespread construction
 - Impacts of the construction the hydrodynamics of surface waters and changes in of the coastline
4. Intensive exploitation of natural resources
 - Soil contamination and degradation: technologies for regeneration of degraded areas
 - Genetic erosion and loss of biodiversity
 - Waste disposal and treatment: Different technologies for waste recovery
5. Education for Sustainable Development
 - Appreciation of the role of populations
 - Valuing public participation in the processes of decision making
 - Analysis of successful cases in Integrated Development and Nature Conservation in Portugal

Recommended reading

1. Brilha, J. (2005). Património Geológico e Geoconservação. Palimage
2. Marquat, C. & Diemer, A. (2016). Educação para o desenvolvimento sustentável. Edições Piaget
3. Ferreira, P. (2020). Portugal e a Agenda 2030 para o desenvolvimento sustentável. Plataforma Portuguesa das ONGD.
4. Novo, M. (2009). El desarrollo sostenible: Su dimensión ambiental y educativa. Editorial Universitas, S. A.
5. Sivasubramanian, V. (Ed.) (2016). Environmental Sustainability Using Green Technologies. CRC Press. <https://doi.org/10.1201/9781315364339>

Teaching and learning methods

Sessions of theoretical-practical nature: issues posed by teacher or by students- discussion / presentation using literature research and developing argumentative capacity. Field classes. Tutorial Classes - discussion of issues

Assessment methods

1. Continuous evaluation - (Regular, Student Worker) (Final)
 - Development Topics - 20% (Individual written reflection on the topics discussed.)
 - Development Topics - 40% (two group works - analysis and public discussion of documents and situations)
 - Intermediate Written Test - 40% (Written test on the topics covered in the UC)
2. Exam - (Regular, Student Worker) (Supplementary, Special)
 - Development Topics - 50% (Classification obtained in the evaluation by frequency.)
 - Final Written Exam - 50% (Written test on the topics covered in the UC)

Language of instruction

Portuguese

Electronic validation

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06-03-2024	07-03-2024	07-03-2024	24-03-2024