

Course Unit	nit 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	ECTS credits 9.0
Туре	Semestral	Semester	2	Code	6083-766-1201-00-23	
Workload (hours)	243	Contact hours	T - Lectures; TP - Lectures a	54 PL - T	C 18 S - solving, project or laboratory; TC	E - OT 18 O 90 - Fieldwork; S - Seminar, E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s)

Adorinda Maria Rodrigues Pereira S. Gonçalves, Amilcar António Teiga Teixeira, Raphael de Vicq 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.

- Show an overview of the main measures of Conservation of Nature.
 Understand the natural and social phenomena associated with ecosystem change.
 Identify the environmental impacts resulting from intensive exploitation of natural resources.
 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
- 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

- Waste disposal and treatment. Different technologies for waste recovery
 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

- Brilha, J. (2005). Património Geológico e Geoconservação. Palimage
 Marquat, C. & Diemer, A. (2016). Educação para o desenvolvimento sustentável. Edições Piaget
 Ferreira, P. (2020). Portugal e a Agenda 2030 para o desenvolvimento sustentável. Plataforma Portuguesa das ONGD.
 Novo, M. (2009). El desarrollo sostenible: Su dimensión ambiental y educativa. Editorial Universitas, S. A.
 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

- 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)

 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

d

Electronic validation			
Adorinda Maria Rodrigues Pereira S. Gonçalves, Amilcar António Teiga Teixeira, Raphael de Vicq Ferreira da Costa	Paulo Miguel Mafra Gonçalves	Sofia Marisa Alves Bergano	Carlos Manuel Costa Teixeira
06-03-2024	07-03-2024	07-03-2024	24-03-2024