

Course Unit	Education for Sustainable Development II	Field of study	Educational Sciences
Bachelor in	Environmental Education	School	School of Education
Academic Year	2021/2022	Year of study	2
Type	Semestral	Semester	2
Level	1-2	ECTS credits	6.0
Code	9082-620-2201-00-21		
Workload (hours)	162	Contact hours	T - , TP 45, PL 18, TC - , S - , E - , OT 9, 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. Recognizing the natural, social and economic relevance of the goods and services provided by ecosystems.
2. Comment critically the degradation of environment quality.
3. Propose measures for prevention or mitigation in cases of environmental degradation.
4. Plan, implement and evaluate actions to information, awareness and public education on prevention of degradation and improvement of environmental quality.
5. Interpret legal instruments for environmental protection.
6. Discuss the legal instruments on access to information and public participation.

Prerequisites

Before the course unit the learner is expected to be able to:
Do not have prerequisites.

Course contents

1. Goods and services provided by ecosystems; 2. Factors of degradation of environmental quality; 3. Preservation and restoration of environmental quality; 4. Legal instruments for environmental protection; 5. Access to information and public participation on environmental issues.

Course contents (extended version)

1. Goods and services provided by ecosystems
 - The value of natural resources as a support for human life
2. Factors of degradation of environmental quality
 - Over-exploitation of resources
 - Degradation of waterways and wetlands
 - Destruction of vegetation and soil erosion
 - Change of relief and coastlines
 - Modification of trophic chains and introduction of exotic species
 - Contamination of soil, water and atmosphere
 - Unplanned urbanization
3. Preservation and restoration of environmental quality
 - Conservation and restoration of biodiversity
 - Decontamination and soil remediation
 - Pollution control of aquatic ecosystems and groundwater
 - Maintenance of ecological networks in urban and agricultural areas
 - Indicators of environmental quality
4. Legal instruments for environmental protection
 - International conventions
 - EU Directives
 - National legislation
5. Access to information and public participation on environmental issues
 - Aarhus Convention
 - Directive on public access to environmental information
 - Directive on public participation in plans and programs on environment
 - Environmental impact assessment
 - Land-use plans

Recommended reading

1. Secretariat of the Convention on Biological Diversity (2012). Cities and biodiversity outlook. Disponível em <http://www.cbd.int/en/subnational/partners-and-initiatives/cbo>.
2. PNUMA (2011). Caminhos para o desenvolvimento sustentável e a erradicação da pobreza – Síntese para tomadores de decisão. Disponível em www.unep.org/greeneconomy
3. Ramos, T. B. (2007). Sistema de indicadores de desenvolvimento sustentável – SIDS PORTUGAL. Agência Portuguesa do Ambiente.
4. Brouwer, R., Brander, L., Kuik, O., & Papyrakis, E. (2013). A synthesis of approaches to assess and value ecosystem services in the EU in the context of TEEB. Final Report. University of Amsterdam.
5. Russ, A. (Ed.) (2015). Urban environmental education. Cornell University Civic Ecology Lab, North American Association for Environmental Education and EE Capacity Project.

Teaching and learning methods

In theoretical classroom the themes approach will be based on exposure framed in concrete situations. The content presentation will be made using multimedia. In practice and field activities will be carried out practical work about the theoretical issues.

Assessment methods

1. Continuous assessment - (Regular, Student Worker) (Final)
 - Presentations - 30% (Presentation of practical work done in groups)
 - Practical Work - 15% (Realização de um trabalho prático em grupo, com o respetivo relatório)
 - Intermediate Written Test - 55% (Evaluation through a written test)
2. Exam - (Regular, Student Worker) (Supplementary, Special)
 - Final Written Exam - 55%

Assessment methods

- Presentations - 45% (Classification obtained in the practical component during class)

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