

Course Unit	Environmental and Natural Resource Economics	Field of study	Entrepreneurship and Social Sciences
Bachelor in	Environmental Engineering	School	School of Agriculture
Academic Year	2022/2023	Year of study	3
Type	Semestral	Semester	1
Level	1-3	ECTS credits	6.0
Code	9099-309-3103-00-22		
Workload (hours)	162	Contact hours	T 30 TP - PL 30 TC - S - E - OT 30 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)

#### Learning outcomes and competences

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

1. Understand the capacity of intervention of Environmental and Natural Resources Economics.
2. Know the different types of market failures and possible policy interventions.
3. Evaluate positive and negative externalities in the context of the market economy.
4. Identify inefficiencies caused by externalities and possible policy interventions.
5. Know the economy of the main natural resources (renewable, non-renewable, recyclable, non-recyclable).
6. Know the main methods of environmental valuation, its application context and the cost-benefit analysis methodology.
7. Understand Sustainability Economics.
8. Understand policies to promote sustainable production and . consumption.

#### Prerequisites

Before the course unit the learner is expected to be able to:  
Not necessary

#### Course contents

Environmental Valorization. Environmental Economics. Environmental Policies

#### Course contents (extended version)

1. ECONOMY AND ENVIRONMENT
  - Environmental issues and Economical Development
  - Planning and Use of the Natural Resources
  - Economical theory and the environmental issues
  - Interaction of the environment in the Economical system
2. ECONOMICAL ANALYSIS OF THE CONTAMINATION
  - Economical efficiency and Environmental Externalities
  - The optimal level of Contamination
  - Obtaining of the optimal Contamination
3. ECONOMY OF THE NATURAL RESOURCES
  - Basic concepts
  - Natural resources non renewal
  - Renewable Natural resources
  - Fishing and Forest's Administration
  - Extinction of the Species
4. ENVIRONMENTAL POLITICS, ECONOMY AND SUSTANABLE DEVELOPMENT
  - Concepts: Environment Economy and Sociology; Environment Law; Environmental Policies
  - The Environmental Politics in the European Union

#### Recommended reading

1. PEARCE, D. W. and TURNER, R K. Economics of Natural Resources and the Environment. Harvester Wheatsheaf, New York, 1990.
2. COMUNIDADES EUROPEIAS. Ambiente 2010: O Nosso Futuro, a Nossa Escolha. 6º Programa Comunitário em Matéria De Ambiente 2001 – 2010. Luxemburgo, 2001.
3. SAMUELSON, P. , "Economia", 14ª Edição, McGraw Hill, S. Paulo, 1993
4. COMUNIDADES EUROPEIAS, 7º Programa Comunitário em Matéria de Ambiente
5. Programa de Desenvolvimento Rural do Continente para 2014-2020

#### Teaching and learning methods

Group work. Debate. Exercises solving

#### Assessment methods

- Alternative 1 - (Regular, Student Worker) (Final, Supplementary, Special)
  - Final Written Exam - 67%
  - Practical Work - 33%

#### Language of instruction

Portuguese

#### Electronic validation

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19-12-2022	19-12-2022	20-12-2022	31-12-2022