

COURSE OF STUDY: Management of green spaces, forests and protected areas (NEST)

ACADEMIC YEAR 2023-2024

ACADEMIC SUBJECT: I.C. “Environmental Economics and Law” (9 CFU) – Module of “Environmental economics basics” (6 CFU)

General information	
Year of the course	I
Academic calendar (starting and ending date)	I term (10-9-23 to 01-26-24)
Credits (CFU/ETCS):	3
SSD	AGR01 Economics and Rural Management
Language	Italian
Mode of attendance	Facultative

Professor/ Lecturer	
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Department and address	Il floor, complex of the central library of Agraria - Campus "E. Quagliariello" Via Amendola 165/a 70126 Bari
Virtual room	Teams page: Principi di economia ambientale Codice: 7k97xnj
Office Hours (and modalities: e.g., by appointment, on line, etc.)	from Monday to Friday from 8.30 to 9.30 by appointment both in presence and in virtual mode

Work schedule			
Hours			
Total	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
Es. 150	60	0	90
CFU/ETCS			
Es. 6	6		

Learning Objectives	<i>At the end of the course students must: know the main aspects of Microeconomics and Macroeconomics, with particular reference to the concept of the environment as an economic resource; know the fundamental concepts of the theory of sustainability: social welfare, public goods and renewable resources; know the economic relations between production, consumption and the environment and the instruments for their governance and protection.</i>
Course prerequisites	<i>Required mathematics notions: understanding the concept of function, graphs of functions; derived functions; study of functions (first and second order conditions for maximum and minimum); simple systems of linear equations.</i>

Teaching strategies	<i>The theoretical part of the course is held in classrooms equipped with multimedia tools such as PC, projector, internet connection, using PowerPoint slides. Given the role of teaching within the Course of Study, frontal teaching is the preferred</i>
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	<i>teaching method, leaving room for discussion with students on case studies proposed by the teacher or the students themselves</i>
Expected learning outcomes in terms of	
Knowledge and understanding on:	<ul style="list-style-type: none"> ○ Ability to understand the basic principles of Environmental Economics that govern the relationship between production and environment
Applying knowledge and understanding on:	<ul style="list-style-type: none"> ○ Ability to interpret from an economic point of view the relations between the economic system and the environment ○ Ability to analyse the economic behaviour of businesses, consumers and markets in relation to their environmental effects. ○ Ability to interpret the functioning of economic and financial instruments for environmental protection
Soft skills	<ul style="list-style-type: none"> ● <i>Making informed judgments and choices</i> <ul style="list-style-type: none"> ○ Ability to identify solutions to improve the production vs environment relationships. ○ Ability to identify obstacles and threats to the introduction of regulatory and economic measures to protect the environment ● <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ Ability to describe economic relations between economic sectors and the environment using appropriate technical language. ● <i>Capacities to continue learning</i> <ul style="list-style-type: none"> ○ Ability to deepen and update their knowledge, to acquire data and information related to the evolution of economic instruments for the protection of the environment and the opportunities present in their application.
Syllabus	
Content knowledge	<p><i>Production and market economics: Goods, needs and utility; production and costs. The market: demand, supply, elasticity and forms of market. The management of the enterprise and the economic results. Economic system and macroeconomic structure.</i></p> <p><i>Environment and economic system: Environmental and natural resources. The exploitation of non-renewable resources. Renewable resources and natural growth. Environmental resources and Coase's theorem. The environment as a public good. Risk, uncertainty and irreversible choices. Economic system and sustainable development. The price system and efficiency.</i></p> <p><i>Economic instruments for the protection of environmental resources: Introductory concepts on the definition of administrative rules. Brief description of the main economic instruments: taxes, tariffs, premiums and subsidies, securities, environmental certificates, civil liability and environmental insurance; voluntary instruments.</i></p> <p><i>The value of environmental resources. Ecosystem services. The evaluation of environmental resources and methods; the evaluation procedures, the cost-benefit analysis; the life cycle assessment (LCA analysis) of products and services. The company's environmental balance. Systems of governance of environmental and territorial resources: Protected areas.</i></p>
Texts and readings	<p><i>Notes from the lessons and teaching materials distributed during the course and available on the virtual site of the course.</i></p> <ul style="list-style-type: none"> ● P. Krugman, R. Wells, M.L. Olney, <i>L'essenziale di Economia</i>, Zanichelli 2008 ● E. Laurent, <i>La nuova economia ambientale</i>. UTET 2022 ● G. Panella, <i>Economia e Politiche dell'ambiente</i>. Carocci Ed. - Roma 2005. ● R.K.Turner, D.W. Pearce, I. Bateman, <i>Economia ambientale. Il mulino Bologna</i> 2003 ● Bresso M. <i>Per un'economia ecologica</i> NIS ed. Roma 1993

Notes, additional materials	
Repository	<i>The teaching material (slides of the lessons) is available on the team page of the course.</i>
Assessment	
Assessment methods	<i>The exam will be conducted orally through an interview that may include the use of pen and paper (which the student will take care to bring with him) to represent graphs and formulas related to topics in the program. The student must show that he has understood: the economic problems related to the relationship between environment and production activities, how is important the use of resources and the management of the externalities produced; will have to show to have understood the normative system legacies to the use of the public goods and the management of the wastes; how to use the methodologies useful to measure the effects on the environment of the productive activities. The criteria for formulating the overall grade are based on the level of knowledge of the themes of the programme and, above all, on the critical ability to link the concepts, more effective definitions, standards and methodologies for the monetary assessment of the effects of production on the environment. During the course of the exam, the student will be asked three questions on the topics of the program with an assessment, not communicated to the student, between 0/30 and 10/30 for each question, the sum of which will give the final grade of the module of Environmental Economics basics; a final grade of more than 18/30 will allow you to pass the test. This grade will average with the grade that the student will earn for the module of Environmental Law, in order to pass the Integrated Course of Economics and Environmental Law. As per the regulation of the Course, there is an optional intermediate test in the middle of the course, which will cover the topics that the teacher will specify during the course. The test will consist of one question and will be evaluated according to the criteria above.</i>
Assessment criteria	<ul style="list-style-type: none"> • <i>Knowledge and understanding</i> <ul style="list-style-type: none"> ○ Ability to clearly describe economic instruments active in environmental protection and the opportunities envisaged • <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> ○ Ability to describe the effects of the introduction of regulatory and economic instruments of environmental protection on the behaviour of citizens, businesses and markets • <i>Autonomy of judgment</i> <ul style="list-style-type: none"> ○ Ability to identify improvement paths and tools to increase the environmental sustainability of agribusiness. • <i>Communication skills</i> <ul style="list-style-type: none"> ○ Ability to describe, with appropriate technical language, the relationship production and environment and its economic phenomena, highlighting the criticalities and opportunities for success and cause-effect relationships • <i>Capacities to continue learning</i> <ul style="list-style-type: none"> ○ Ability to critically analyse concrete situations also identifying additional sources of deepening and updating
Final exam and grading criteria	
Further information	
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