Environmental Economics

Educational subject description sheet

Basic information

Field of study Joint Bachelor in Sustainability	**Education cycle** 2025/26
Speciality Economics, Management & Engineering	**Subject code** UJ.WPAJBSEMES.840.16487.25
Organizational unit Faculty of Law and Administration	**Lecture languages** english
Study level first cycle (joint degree programme)	**Subject related to scientific research** Yes
Study form full-time degree programme	**Disciplines** Economics and finance, Earth sciences and the environment
Education profile General academic	**ISCED classification** 0311 Economics
Mandatory obligatory	**USOS code**

Subject coordinator	Piotr Szwedo
Lecturer	Sandra Rousseau

Period Semester 3	**Examination** exam **Activities and hours** Lecture: 24	**Number of ECTS points** 3.0

Goals

C1	The central objective of this course is to provide the students with a problem-solving framework for the analysis and remediation of environmental market failure problems. "Environmental Economics" is the theoretical and empirical scientific study of economic aspects of environmental problems in the broadest sense.

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge – Student knows and understands:			
W1	the way environment and welfare laws and rules are designed	JBS_K1_W05	written exam
W2	(business) economics concepts and theories and how they apply to environmental, welfare and sustainability problems	JBS_K1_W07	written exam
Skills – Student can:			
U1	assess and quantify the environmental effects using specific indicators	JBS_K1_U03	written exam
U2	assess environmental, prevention and sustainability measures based on the strategy of the organization and is able to estimate the financial impact	JBS_K1_U03	written exam
U3	weigh the pros and the cons of policy instruments and approaches using economic concepts and theories.	JBS_K1_U03	written exam
Social competences – Student is ready for:			
K1	to take a critical view of societal problems from a sustainability perspective	JBS_K1_K03	written exam
K2	to critically reflect on his/her own attitude towards sustainability	JBS_K1_K01, JBS_K1_K03	written exam

Calculation of ECTS points

Activity form	Activity hours*	
Lecture	24	
preparation for the exam	28	
exercises performance	12	
preparation for classes	12	
Student workload	**Hours** 76	**ECTS** 3.0

* hour means 45 minutes

Study content

No.	Course content	Subject's learning outcomes
1.	Introduction: interaction environment and economy	W1
2.	Basic models of environmental economics: externalities, common goods and public goods	W1, K1

No.	Course content	Subject's learning outcomes
3.	Criteria for policy instruments Decentralized policy instruments (property rights)	W1, W2, U3, K2
4.	Decentralized policy instruments (liability, labels, ...) Centralized policy instruments (standards)	W1, W2, U3
5.	Centralized policy instruments (Pigouvian taxes, tradable permits, ...)	W1, W2, U3
6.	Monitoring and enforcement	W2, U3
7.	Valuation of environmental goods and services: concepts Valuation of environmental goods and services: revealed preference methods	U1, U3
8.	Valuation of environmental goods and services: stated preference methods	U1, U3
9.	Cost-benefit analysis: private vs society perspective	W1, W2, U1, U3, K1, K2
10.	Environmental investment analysis	W2, U2
11.	International trade Cross-border pollution problems	U3, K1
12.	Climate change and climate policies	W1, W2, U3, K1

Course advanced

Teaching methods :

conversation lecture, discussion, practicals

Activities	Examination methods	Credit conditions
Lecture	written exam	Written closed book exam, including open questions, understanding questions and application requests. Students will be assessed on their insights into the theoretical concepts of the course and their capability to apply the acquired theoretical insights to case studies.

Entry requirements

None

Literature

Obligatory

1. Rousseau, S. (2021). Introduction to environmental economics. Ekonomika student manual Toledo is being used for this learning activity.

Effects

Code	Content
JBS_K1_K01	The graduate can encourage sustainability-driven practices in the workplace and appraise sustainability of own values, perceptions, roles, and actions, with a special focus on environmental wellbeing.
JBS_K1_K03	The graduate can consider different visions of the future and develop own evidence-based opinions in reference to the balance of values linked to economic development, social welfare, and environmental protection.
JBS_K1_U03	The graduate can apply adequate methods and tools, including selected IT tools, to solve problems related to data collection, analysis, and management in the context of sustainability.
JBS_K1_W05	The graduate can identify essential international instruments and institutions related to sustainability and explain their potential role in resolution of a given problem.
JBS_K1_W07	The graduate can apply the theory and methodology of disciplines included in the selected specialisation track to sustainability-related problems, taking into consideration practical limitations such as protection of intellectual property.