Sustainable Finance

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.8100.16493.25
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
Education profile General academic	**ISCED classification** 0412 Finance, banking and insurance
Mandatory obligatory	**USOS code**

Subject coordinator	Piotr Szwedo
Lecturer	Mariusz Trojak, Sonia Quiroga

Period Semester 5	**Examination** exam **Activities and hours** Discussion class: 44	**Number of ECTS points** 5.0

Goals

C1	The aim of this course aligns closely with the findings and recommendations of the Stern Review on the Economics of Climate Change emphasizing the urgent need for action to address climate change and highlights the critical role that finance and investment play in driving sustainable solutions. This course equips students with a deep understanding of how financial mechanisms can be harnessed to mitigate climate risks and promote environmental sustainability. Through a comprehensive exploration of green investments, carbon pricing strategies, sustainable development goals, ESGs, etc, students will be empowered to apply these insights in real-world scenarios, contributing to the global transition towards a more sustainable and resilient future. UNFCCC COP negotiations role will be explored to inspire mechanisms to become proactive agents of change in the pursuit of a greener, more sustainable and resilient economies.

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge – Student knows and understands:			
W1	economic sustainability and resiliency: differences in relevant sustainability definitions, models and approaches	JBS_K1_W01	written exam, essay
W2	international institutions and policies (EU taxonomy, Green deal, etc) and is able to identify the role of EU policy towards sustainable futures	JBS_K1_W05	written exam, essay
W3	international markets roles to transition, the interconnections between various aspects of sustainability and identify their significance in the context of natural and social sciences	JBS_K1_W06	written exam, essay
Skills – Student can:			
U1	conduct research on the economic resiliency and financial instruments at the EU level	JBS_K1_U01	written exam, essay
U2	develop discussions or debating ideas on the role of financial markets as climate change adaptation option	JBS_K1_U02	written exam, essay
Social competences – Student is ready for:			
K1	to identify essential international instruments and institutions related to sustainability.	JBS_K1_K01	written exam, essay
K2	to explore scientific data and methods as a basis for sustainability-conscious financial decision-making.	JBS_K1_K05	written exam, essay

Calculation of ECTS points

Activity form	Activity hours*
Discussion class	44
preparation for classes	75
preparation for the exam	6

Student workload	Hours	ECTS
	125	5.0

* hour means 45 minutes

Study content

No.	Course content	Subject's learning outcomes
1.	Introduction to economic and financial risks related to sustainability concepts.	W1
2.	Climate change finance: cost of action and cost of inaction.	W1
3.	The role of COP negotiations and their financial implications	W3
4.	Physical versus transition risks	W1, W3
5.	Impact assessments of economic risks in the different sectors (Agriculture, Water)	W1, W3, K1
6.	Impact assessments of economic risks in the different sectors (Energy, Building)	W1, W3, K1
7.	Impact assessments of economic risks in the different sectors (Health, Environment)	W1, W3, K1
8.	Impact assessments of economic risks in the different sectors (Other sectors)	W1, W3, K1
9.	Sustainable finance and EU taxonomy.	W2
10.	Economic aspects of adaptation to climate change	W2, W3, U2
11.	Resiliency framework and the limits for adaptation	W3, U1
12.	Sustainable reporting challenges – business and regulatory perspective	W3, U1
13.	The ESG reporting – business relevance	W3, U1
14.	Content and structure of ESG report	W3, U1
15.	ESG strategy for the company	W1, U1, K1
16.	Traditional finance versus sustainable finance	W3, U1
17.	Climate risk impact on financial risk	W3
18.	Responsible banking – fossil fuels versus green energy financing	W3, K2
19.	Green loans, green bonds and sustainability-linked products	W3, U1
20.	Risk and return in sustainable financial investments	W2, W3
21.	Rating implications of sustainable finance	W2, W3
22.	Private and public sources of sustainable projects	W2, U2

Course advanced

Teaching methods :

conversation lecture, solving tasks, practicals

Activities	Examination methods	Credit conditions
Discussion class	written exam, essay	Exam – students pass if they achieve minimally 10/20; essay – reflective and demonstrating that the learning material is understood

Entry requirements

None

Literature

Obligatory

1. Naifar N (2024). Climate Change and Finance. Navigating the Challenges and Opportunities in Capital Markets, Ed. Springer Monasterolo, I. (2020). Climate change and the financial system. Annual Review of Resource Economics,12, 299-320. Stern, N. (2006). Stern Review: The economics of climate change.

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_K05	The graduate can defend the importance of scientific data and methods as a basis for decision-making.
JBS_K1_U01	The graduate can critically analyse academic literature, formulate research questions and conduct research under supervision.
JBS_K1_U02	The graduate can present and report knowledge, methodologies, ideas, problems and solutions, clearly and comprehensively, in different forms destined for different audiences – including discussions and debates which require defending a substantiated opinion, as well as conversations in a foreign language at the CEFR B2 level.
JBS_K1_W01	The graduate can describe the concept of sustainability and recognize the differences in relevant definitions, models and approaches.
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_W06	The graduate can describe interconnections between various aspects of sustainability and identify their significance in the context of natural and social sciences, with a special focus on disciplines included in the selected specialisation track (law and politics; chemistry and physics; chemistry and biology; economics and geography; economics, management and engineering; humanities).