

Karta przedmiotu - Environmental Factors

Kierunek: ESG in Finance

Wymagania wstępne

1. Knowledge of the concept of Sustainable Development.
2. Basic knowledge of relations between the economy, society, and the environment.
3. Completed macroeconomics course.

Nazwa przedmiotu	Environmental Factors	
Język prowadzenia przedmiotu	angielski	
Kod/Specjalność	EF-EF-XX-X2-23/24Z-ENVFAC Brak	
Kategoria przedmiotu	kierunkowe lub ogólne	
Profil studiów	Ogólnoakademicki	
Poziom PRK	Poziom 7 - 2. stopień (studia magisterskie)	
Rok studiów/semestr	1/1	
Forma zajęć/liczba godzin	stacjonarne:	Konwersatorium: 45
	niestacjonarne:	Konwersatorium: 27
Dyscypliny/punkty ECTS	Ekonomia i finanse:	7
	Nauki o zarządzaniu i jakości:	0
	Nauki o polityce i administracji:	0
	Informatyka:	0
	Nauki o kulturze i religii:	0
	Razem	7
Wykładowca odpowiedzialny za przedmiot	Rosiek Ksymena, dr (Katedra Finansów Rozwoju Zrównoważonego)	
Cele przedmiotu	Kod	Opis
	C1	To acquaint students with the nature and consequences of the relations between economic activity and the environment, the background of the climate crisis, and the depletion of resources.
	C2	To acquaint students with climate change mitigation and adaptation policies, international agreements, conventions, and policy instruments.
	C3	To acquaint students with undertaken environmental activities and initiatives and about the ways of financing them.
	C4	Developing the ability to define the activities empowering reduction of the environment degradation and natural resources depletion with a focus on climate transformation risks.
	C5	Developing the ability to describe financial instruments supporting sustainable development, blue economy, and circular economy.
	C6	Strengthening environmental awareness and the need to take into account environmental aspects in business activities and environmental initiatives.
	C7	Developing the ability to critically evaluation of received content in the field of environmental economics, the climate crisis, and using economics instruments (policy instruments), including financial ones.

Realizowane efekty uczenia się	Kod	Kat.	Opis	Kierunkowe efekty uczenia się	
	E1	W	The student knows and understands the specifics and consequences of the links between economic activity and the natural environment, the causes of the climate crisis and the depletion of resources, has knowledge of climate change mitigation instruments, policies, international agreements and conventions, and environmental initiatives of economic entities, institutions, and organizations and about the ways of financing them.	EF-ST2-EF-W05-23/24Z	EF-ST2-EF-W06-23/24Z
	E2	U	The student is able to indicate the directions of actions reducing the degradation of the natural environment and the risk of a climate catastrophe, is able to describe the trends of modification of financial instruments supporting sustainable development, blue economy and circular economy.	EF-ST2-EF-U03-23/24Z	EF-ST2-EF-U04-23/24Z EF-ST2-EF-U07-23/24Z
	E3	K	The student is ready to critically evaluate the received content in the field of environmental economics, the climate crisis, and the possibility of modifying the functioning of the economy using instruments, including financial ones, in order to counteract the adverse impact of economic activity on the natural environment. The student is ready to take environmental initiatives.	EF-ST2-EF-K02-23/24Z	EF-ST2-EF-K03-23/24Z
Sposoby weryfikacji efektów uczenia się	Egzamin testowy, Średnia ważona albo arytmetyczna ocen cząstkowych, Aktywność na zajęciach, Ćwiczenie praktyczne, Kolokwium, Odpowiedź ustna, Prezentacja, Projekt indywidualny, Projekt zespołowy, Referat, Zadania tablicowe.				
Treści przedmiotu	Konwersatorium				
	Kod	Opis	S (45)	N (27)	
	K1	Natural capital. The economy of renewable and non-renewable resources. External effects. Environmental challenges: biodiversity loss, deforestation, desertification, use of land and marine resources, pressure on water resources, waste, and pollution deposited in the environment;	3	2	
	K2	Climate challenges. Analysis of climate scenarios – the most likely threats in different parts of Europe and challenges for the world (developed countries vs. developing countries). Climate change mitigation and adaptation. Indicator description of these phenomena. A just and inclusive climate transition. Climate change adaptation and resilience measures;	5	3	
	K3	Sustainable development as a management paradigm. Intergenerational responsibility	3	2	
	K4	Climate and environmental policy. International agreements and climate and environmental conventions. EU environmental taxonomy and instruments of internalization of external costs (public - environmental taxes, subsidies; private, including markets and property rights, prices of carbon dioxide emissions).	3	2	
	K5	Low-carbon economy/Circular economy/Green economy - goals and common areas, new business models. Transparency and traceability of the supply chain;	5	2	
	K6	Ecological footprint, carbon footprint, water footprint, environmental rucksack - measurement of the degree of use of environmental resources at the company, region or country level;	4	2	
	K7	Energy and climate transformation. Development of the renewable energy market; emissions trading.	4	2	
	K8	The impact of production and service activities on the natural environment, sectors with a significant impact, and regional differences. Integrated investments and end-of-pipe investments. Eco-innovations, ecological and ESG-related products;	3	2	
	K9	Review of investment project evaluation methods. An integrated approach to discounting methods based on the present value of cash flows (discounting in the intergenerational perspective, shadow prices, residual value in investment projects, positive effects spread over time). Hybrid projects and their profitability (cost-benefit analysis in the assessment of environmental investments, cost minimization method, annual cost method). Challenges in assessing intergenerational investments;	6	4	
	K10	The 'polluter pays' principle and sustainable financing of environmental investments (investors' own funds, public aid, debt financing, including green bonds, sustainable crowdfunding),	3	2	
	K11	Ecological, climatic and catastrophic risk in investment projects - identification and the risk of overlooking them. Climate risk (risk related to the effects of climate change and risk related to the response to climate change, with transformation) - challenges for enterprises and the financial sector;	3	2	
K12	Ecological audit and its elements.	3	2		
Metody i formy prowadzenia zajęć	Analiza przypadku, Ćwiczenia laboratoryjne, Ćwiczenia przedmiotowe, Ćwiczenia tablicowe, Dyskusja, E-learning, Konwersatorium, Nauczanie problemowe, Praca w grupach, Prezentacja, Symulacja, Warsztaty.				

Nakład pracy studenta (liczba godzin kontaktowych, pracy on-line i pracy samodzielnej)	Rodzaj aktywności		Liczba godzin	
			stacjonarne	niestacjonarne
	Udział w zajęciach dydaktycznych w bezpośrednim kontakcie z prowadzącym		45	27
	Udział w konsultacjach		15	20
	Udział w kolokwium/egzaminie		4	4
	Praca własna studenta		35	40
	E-learning		10	20
	Inne (kontaktowe)		28	28
	Inne (bezkontaktowe)		38	36
	Suma godzin		175	175
	Liczba punktów ECTS		7	7

Macierz realizacji przedmiotu	Efekt uczenia się	Odniesienie do efektów kierunkowych	Cele przedmiotu	Treści przedmiotu	Metody/narzędzia dydaktyczne	Sposoby weryfikacji efektu
	E1	EF-ST2-EF-W05-23/24Z EF-ST2-EF-W06-23/24Z	C1 C2 C3	K1 K2 K3 K4 K5 K6 K7 K8 K9 K10 K11 K12	N2 N3 N4 N5 N6 N7 N9 N11 N13 N14 N15 N17	F1 F2 F3 F4 F5 F6 F7 F8 F9 P3 P4
	E2	EF-ST2-EF-U03-23/24Z EF-ST2-EF-U04-23/24Z EF-ST2-EF-U07-23/24Z	C4 C5	K1 K2 K3 K4 K5 K6 K7 K8 K9 K10 K11 K12	N2 N3 N4 N5 N6 N7 N9 N11 N13 N14 N15 N17	F1 F2 F3 F4 F5 F6 F7 F8 F9 P3 P4
	E3	EF-ST2-EF-K02-23/24Z EF-ST2-EF-K03-23/24Z	C6 C7	K1 K2 K4 K5 K6 K7 K8 K9 K10 K11 K12	N2 N3 N4 N5 N6 N7 N9 N11 N13 N14 N15 N17	F1 F2 F3 F4 F5 F6 F7 F8 F9 P3 P4

Literatura podstawowa	Lp.	Opis pozycji
	1	Boardman, A. E., Greenberg, D. H., Vining, A. R., & Weimer, D. L. (2018). Cost-Benefit Analysis: Concepts and Practice. Cambridge University Press; Cost-benefit analysis concepts and practice by Anthony E. Boardman.
	2	Bose, S., Dong, G., & Simpson, A. (2019). The Financial Ecosystem: The Role of Finance in Achieving Sustainability. Springer International Publishing;
	3	Sobti, R. C., Malhotra, S. K., Jaiswal, K., & Puri, S. (2022). Environmental Studies and Climate Change. CRC Press.

Literatura uzupełniająca	Lp.	Opis pozycji
	1	Brears, R. C. (2017). The Green Economy and the Water-Energy-Food Nexus. Springer.
	2	Dryzek, J. S., Norgaard, R. B., & Schlosberg, D. (2011). The Oxford Handbook of Climate Change and Society. OUP Oxford.
	3	Earle, S. (2021). A Brief History of the Earth's Climate: Everyone's Guide to the Science of Climate Change. New Society Publishers.
	4	Gangi, F., Meles, A., Daniele, L. M., Varrone, N., & Salerno, D. (2021). The Evolution of Sustainable Investments and Finance: Theoretical Perspectives and New Challenges. Springer Nature.
	5	Hill, J. (2020). Environmental, Social, and Governance (ESG) Investing: A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio. Academic Press.
	6	Markandya, A., & Halsnaes, K. (2021). Climate Change and Sustainable Development: Prospects for Developing Countries. Routledge.
	7	Meisel, J. H., & Puttaswamaiah, K. (2020). Cost-benefit Analysis: With Reference to Environment and Ecology. Routledge.
	8	Redclift, M., & Springett, D. (2015). Routledge International Handbook of Sustainable Development. Routledge; Routledge International Handbook of Sustainable Development by Michael Redclift, Delyse Springett.
	9	Sanneh, E. S. (2018). Systems Thinking for Sustainable Development: Climate Change and the Environment. Springer.
	10	Thomas, V. (2023). Risk and Resilience in the Era of Climate Change. Springer Nature.
	11	Torre, M. L., & Leo, S. (2023). Contemporary Issues in Sustainable Finance: Exploring Performance, Impact Measurement and Financial Inclusion. Springer Nature.

Forma i warunki zaliczenia przedmiotu	Sposób obliczania średniej z ocen bieżących (zgodnie z §28 pkt. 4 Regulaminu studiów)	
	Current grades will be determined on the basis of attendance and active participation in classes and discussions as well as individual/team work (max. 3 people in a team) in the form of a short project prepared on a topic related to the subject of the classes.	
	Sposób obliczania oceny końcowej (zgodnie z §28 pkt. 5 Regulaminu studiów)	
	The final grade is determined on the basis of the sum of points collected during classes/workshops: for activity, for group and individual projects, for active participation in a conversation during classes, for a test, and for other scored activities during classes.	
	Dodatkowe informacje o sposobie obliczania oceny końcowej lub egzaminie	
	The lecturer may raise the final grade by 1.0 for the impressive activity and commitment of the student to learning and practicing skills.	
Osoby prowadzące przedmiot	Lp.	Nauczyciel
	1	Rosiek Ksymena, dr (Katedra Finansów Rozwoju Zrównoważonego)
Informacje dodatkowe	during classes, students should have a tablet or laptop at least one per two people	

Status karty: **ZAAKCEPTOWANO** przez: Kubińska Elżbieta, dr hab.