

Subject card

Subject name and code	Methods and Tools of Economic System Description, PG_00172315						
Field of study	International Economic Relations						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		1.0		
Learning profile	academic		Assessment form				
Conducting unit	Department of Logistics -> Faculty of Economics -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		mgr Dariusz Weiland				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	15		5.0		5.0	25
Subject objectives	Familiarizing students with methods and tools for describing economic systems						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[MSGL3_U08] uses basic methods and computer programmes as well as marketing techniques and tools to acquire and analyse data necessary in his/her professional work to diagnose economic processes and make adequate economic decisions	The student is able to use basic methods and tools for describing international economic systems, including IT tools and data acquisition techniques, as well as marketing tools in order to diagnose economic processes and make appropriate economic decisions.	[SU4] test/exam - oral or written [SU8] observation of student's independent or team work
	[MSGL3_U13] can prepare presentations and oral speeches on selected specific problems concerning international economic relations (in connection with the chosen speciality within International Economic Relations), using basic theoretical approaches, specialist terminology, principles of collecting data from various sources, their description and interpretation, and drawing conclusions based on scientific literature	The student has the ability to prepare presentations and oral presentations in the form of a verbal description of economic systems using specialized terminology.	[SU4] test/exam - oral or written [SU8] observation of student's independent or team work
	[MSGL3_K05] correctly identifies, diagnoses and solves dilemmas and various options of solutions related to the profession	The student correctly identifies, diagnoses and resolves dilemmas and various variants of solutions related to the profession of an economist.	[SK4] test/exam - oral or written [SU8] observation of student's independent or team work
	[MSGL3_U10] can take an active part in a debate, presenting his/her own viewpoint and supporting it with argumentation based on selected theories, opinions of various authors and/or statistical data	The student is able to actively participate in the debate on the methods of describing economic systems and present his/her own position, supporting it with arguments based on selected theories, views of various authors and/or statistical data	[SU4] test/exam - oral or written [SU8] observation of student's independent or team work
	[MSGL3_U12] can prepare written assignments concerning detailed problems of international economic relations (in connection with the chosen speciality within International Economic Relations), using specialist terminology, theoretical and methodological approaches, principles of collecting data from various sources, their description and interpretation, principles of formulating research theses, drawing conclusions on the basis of scientific literature and factual data, and making international comparisons	The student is able to prepare written works in the form of a description of economic systems using professional terminology.	[SU4] test/exam - oral or written [SU8] observation of student's independent or team work
	[MSGL3_U02] can assess economic and social phenomena occurring in an open economy, interpret necessary statistical data and economic indicators, as well as forecast economic phenomena and processes, using standard methods and tools applied in economic sciences	The student is able to evaluate economic and social phenomena occurring in the open economy, interpret the statistical data and economic indicators necessary in this respect, and also forecast economic phenomena and processes using standard quantitative and qualitative methods and tools	[SU4] test/exam - oral or written [SU8] observation of student's independent or team work
	[MSGL3_W10] knows selected methods and tools, including IT tools and data acquisition techniques, which make it possible to describe and analyse economic entities operating on the international market; knows the processes and phenomena occurring in them and between them, and processes supporting decision-making	The student knows the basic methods and tools for describing international economic systems, including IT tools and data acquisition techniques that allow for describing and analyzing economic entities operating on the international market and the processes and phenomena occurring in them and between them, as well as supporting decision-making processes.	[SW4] test/exam - oral or written [SW3] text preparation/written work

Subject contents	1. Economic system as an object of description. Ontology (reism, eventism, processualism, relationism, systemism), elements of the economic system (resources, events, processes, relations), economic system as a holon, features (properties, variables) of the economic system, measures of features of the economic system, methods and tools of ontological description of economic systems. 2. Tabular and graphical presentation of data. Statistical inference and descriptive statistics. Presentation of tools used for statistical description, including IT tools (Microsoft Excel, Statistica). Unordered calculating series, ordered calculating series, point and interval distributive series, diagram, histogram, frequency polygon, count curve, pie chart of counts and percentages, bar chart. 3. Basic measures of describing the economic system. Measures of central tendency, measures: differentiation, skewness, concentration. 4. Studying the interdependence of economic system features. Correlation analysis, regression analysis. 5. Studying the dynamics of economic phenomenaThe essence of time series, absolute and relative increases, indexes, time series decomposition. Topic no. 1 will be implemented during practical classes using the ARIS Express tool.Topics no. 2-5 will be implemented during practical classes using the Microsoft Excel tool.		
Prerequisites and co-requisites	Computer skills, basic knowledge of spreadsheets, basic knowledge of economics and management, ability to apply mathematics in economics and management		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	group project	51.0%	50.0%
	final test	51.0%	50.0%
Recommended reading	Basic literature	1. W. Makać, D. Urbanek-Krzysztofiak: Metody opisu statystycznego. Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk, 2020 2. C. Mańkowski: Modelowanie procesów logistycznych. Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk 2020 (do pobrania tutaj/zakładka TREŚĆ) 3. L. Reszka: Decyzje menedżerskie w logistyce. Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk 2019 (do pobrania tutaj/zakładka TREŚĆ) 4. Portal edukacyjny www.ariscommunity.com	

	Supplementary literature	1. C. Mańkowski: Ontological Foundations for Business Logistic Process Modeling. "Railway Transport and Logistics" 2007, no. 2, p. 30-38 2. A. Wojna: Wykłady z podstaw statystyki. Cz. 1, Opis statystyczny. Wydawnictwo Uczelniane Politechniki Koszalińskiej, Koszalin 2011 Wszystkie prawa zastrzeżone (c) Cezary Mańkowski 3 / 4 SYLABUS rok akademicki 2024/25 Wydział Ekonomiczny Uniwersytet Gdański 3. B. Pułaska - Turyna: Statystyka dla ekonomistów. Wydawnictwo Difin, Warszawa 2011 4. J. Józwiak, J. Podgórski: Statystyka od podstaw. Polskie Wydawnictwo Ekonomiczne, Warszawa 2012 5. A. Maksymowicz-Ajchel: Wstęp do statystyki. Metody opisu statystycznego. Wydawnictwo Uniwersytetu Warszawskiego, Warszawa 2020 6. M. Kowalski: Podstawy statystyki opisowej dla ekonomistów. Wydawnictwo Wyższej Szkoły Bankowej, Poznań - Chorzów 2006
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	1) The lecture ends with an exam, exercises - with a grade2) The basis for obtaining a grade from the lecture part is a test with the following points: a) for a correct answer 1.0 points b) for no answer 0.0 points c) for an incorrect answer -0.5 points3) The basis for obtaining a grade from the exercises part is the completion of a project in the Aris program and obtaining a positive grade from the colloquium (test)4) Content scope: material covered in classes (lecture + exercises)5) Grading scale (taking into account bonus points for active participation in lectures and exercises) in accordance with the Study Regulations.	
Work placement	Not applicable	

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