University of Gdańsk

Subject card

Subject name and code	Statistical Analysis in Business Projects, PG_00119197		
Field of study	Economics		
Date of commencement of studies	October 2024	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	3	Language of instruction	Polish
Semester of study	6	ECTS credits	2.0
Learning profile	academic	Assessment form	exam
Conducting unit	Department of Statistics -> Faculty of Management -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Olga Komorowska	
	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

Additional information:

- Multimedia presentation
- Working with data (Excel)
- Group activity, cooperation
- Educational games

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	0.0	0.0	15

Subject objectives

The student's knowledge and understanding of the issues of statistical research used in the implementation of business projects. Acquiring the ability to critically evaluate research results, understanding the strengths and weaknesses of incomplete and full research. The ability to choose the appropriate analytical method for the available data and the stated purpose of the study.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[EKONL3_U10] has the ability to prepare oral presentations, in Polish and in a foreign language, on economic and social issues, using specialist terminology, theoretical approaches, principles of collecting various sources of data, their description and interpretation, and making inferences from scientific literature, and is able to take an active part in a debate	The student knows various data sources and is able to interpret data provided by institutions such as the Central Statistical Office. The student is able to pose a problematic question to a scientific article he has read.	[SU1] oral statement/conversation/ discussion
[EKONL3_U04] can predict and forecast the course of economic and social processes and phenomena	The student identifies the appropriate method in relation to the available data.	[SU1] oral statement/conversation/ discussion [SU5] implementation of a problem task
[EKONL3_K02] is aware of the level of knowledge in the field of economics and understands the need to deepen and update this knowledge throughout life	Ability to discuss data and draw conclusions from a read scientific article.	[SK1] oral statement/conversation/ discussion
[EKONL3_W06] knows in depth of selected methods and tools, including statistical and econometric techniques, for describing economic agents and structures as well as social institutions and the processes taking place in them	Sudent describes the known data analysis methods. The student understands the strengths and weaknesses of incomplete and full research.	[SW1] oral statement/ conversation/discussion [SW5] implementation of a problem task
[EKONL3_K06] is willing to be guided in his professional life by business ethics and corporate social responsibility, to respect others and to be loyal to his employer	Able to cooperate and work in a group.	[SK5] implementation of a problem task

Subject contents

1. Chart Analysis (Replay)
2. Variable transformations
3. Measurement scales
4. Methods of linear ordering (rank and Hellwig)
5. Normal distribution
6. Random and non-random methods of selecting sampling units
7. Determining the minimum sample size
8. Random and non-random errors
9. Point and interval estimation for mean and proportion
10. Odds ratio
11. Oaxaca-Blinder (OB) decomposition

Prerequisites and co-requisites

Knowledge of the basics of statistics.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Project/Written work	0.0%	50.0%
Oral answer	0.0%	30.0%
Work in classes	0.0%	20.0%

Recommended reading

Basic literature	Wybrane pozycje są dostępne w języku polskim.
Supplementary literature	Wybrane pozycje są dostępne w języku polskim.
eResources addresses	

Example issues/ example questions/ tasks being completed

1. What are the characteristics of a box plot?
2. Why isn't a pie chart always a good chart to show structure?
3. What is the purpose of standardizing variables?
4. What is a sampling frame?
5. What are the characteristics of a normal distribution?
6. State the disadvantages of the linear ordering method, the so-called Hellwig method.
7. What is OB decomposition?

Work placement

Not applicable

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