



Subject card

Subject name and code	MICROECONOMETRICS, PG_00067631						
Field of study	Economic Analytics						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2025/2026		
Education level	second-cycle studies		Subject group		Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	1		Language of instruction		Polish		
Semester of study	1		ECTS credits		3.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department Of Statistics And Econometrics -> Faculty Of Management And Economics -> Wydziały Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor						
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	0.0	0.0	45
	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	45		5.0		25.0	75
Subject objectives	Explains the importance and interrelations between factors describing economic and social phenomena, based on microdata, selecting appropriate econometric tools allowing for their proper interpretation						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K7_W02] understands the significance and interrelationships of key components describing economic processes, drawing on in-depth knowledge aligned with major developmental trends in scientific disciplines related to the field of economic analytics.		selects appropriate econometric methods to describe microeconomic relationships in economic and social phenomena		[SW1] Assessment of factual knowledge		
	[K7_U03] formulates research hypotheses and select appropriate methods for their verification using advanced it tools.		formulates research problems and effectively solves them using properly selected econometric methods		[SU4] Assessment of ability to use methods and tools		
Subject contents	Introduction to microeconometrics Linear models Blinder-Oaxaca decomposition Models of qualitative binomial variables (logit, probit) Models of polynomial variables (logit polynomial model, conditional logit model) Tobit model and Heckman selection Multilevel models Proportional Hazard Model: Cox Model						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Laboratory exercises		60.0%		50.0%		
	Final written exam		60.0%		50.0%		

Recommended reading	Basic literature	<p>Cameron, C.A. and Trivedi, P.K. Microeconometrics: methods and applications. Cambridge University Press, 2005.</p> <p>Hansen, B. E. Econometrics. Princeton University Press. 2022.</p>
	Supplementary literature	<p>Greene W.H. Econometric Analysis, Pearson Prentice Hall, 2018</p> <p>Békés, G. and Kézdi, G. Data Analysis for Business, Economics, and Policy. Cambridge University Press. 2021.</p> <p>Hox, J. J., Moerbeek, M., & van de Schoot, R. Multilevel analysis: Techniques and Applications (3rd ed.). Routledge. 2018.</p> <p>https://www.ecb.europa.eu/stats/ecb_surveys/safe/html/index.en.html - Survey on the access to finance of enterprises (SAFE). http://microdata.worldbank.org http://www.lisdatacenter.org</p>
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	<p>Problem: Download LWS microdata for the US (2010) from the Luxembourg Income Study website (http://www.lisdatacenter.org/resources/self-teaching/). Analyze wealth gaps by gender and race (comparison groups) using the Blinder-Oaxaca distribution. Use adjusted disposable net worth (ANW) as the dependent variable. Your predictors should include age, household size, education, employment, disposable income, work experience, and marital status. When making an estimate, remember 'multiple imputations.' Discuss the results</p> <p>Question 1: Who receives higher wages: highly educated men or women?</p> <p>Question 2: What is the relationship between immigration status and wages (ceteris paribus)?</p> <p>Question 3: Do women with small children earn more or less than women without children (ceteris paribus)?</p>	
Work placement	Not applicable	

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