



Subject card

Subject name and code	ECONOMIC GROWTH, PG_00061124						
Field of study	Management						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	second-cycle studies		Subject group		Optional subject group Specialty subject group 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	2		Language of instruction		English		
Semester of study	3		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		exam		
Conducting unit	Department Of Economic -> Faculty Of Management And Economics -> Wydziały Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Joanna Wolszczak-Derlacz				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	15.0	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		6.0		49.0	100
Subject objectives	Applies the most important models of the growth and convergence theory as well as computational methods used in empirical verification of these models						
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 studies.		identifies phenomena related to the theory of growth and convergence based on known theories and possible analytical methods		[SW1] Assessment of factual knowledge		
	[K7_U02] presents logical and well-founded arguments regarding obtained results through the analysis and synthesis of information in various business contexts, critically evaluating their interpretation.		prepares and presents the results of analyzes in a convincing manner, along with their in-depth interpretation		[SU5] Assessment of ability to present the results of task		

Subject contents	LECTURE How to measure economic growth and convergence? Sigma and beta convergence Polarization of development in the world and in Europe History of economic growth and real convergence processes Models of economic growth introduction Solow growth model (Cobb-Douglas production function, Solow diagram, Solow decomposition) Extensions of growth models: Mankiw, Romer, Weil (MRW) Model, AK Model, Learning by doing, Endogenous Growth Factors: Human Capital (Lucas Model), Technology, Government Sector (Barro Model), Role of Institutions and Social Capital International trade Empirical research on convergence Price convergence - case study LABORATORY Practical analyzes of topics covered in lectures using real source data Introduction to databases Development measures Mathematical and statistical measures of convergence Analysis of real convergence processes Growth models The role of technological progress, human capital, institutions, trade, geographical factors, etc. in real convergence processes		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Computer test	60.0%	50.0%
	Exam	60.0%	50.0%
Recommended reading	Basic literature	Charles I Jones , Dietrich Vollrath (2024). Introduction to Economic Growth, 4th ed. WWNorton. Weil D. (2014). Economic Growth . Routledge Aghion P., Howitt P. (2009) The Economics of Growth, MIT Press Wolszczak-Derlacz J. Convergence or divergence in the European Union (2007) in:Selected economic problems	
	Supplementary literature	Acemoglu D. (2009) Introduction to Modern Economic Growth, Princeton University Press Barro R. (1990), Government Spending in a Simple Model of Endogenous Growth. Journal of Political Economy vol.98, no.5, 103-126 Barro R.J., Xavier Sala-i-Martin (2003) Economic Growth: 2nd Edition, MIT Press Romer P. (1990) Endogenous Technological Change, Journal of Polictical Economy vol 98 no 5: s. 71-102	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	What are endogenous growth factors? Explain the Solow diagram Define the differences between absolute and conditional convergence Using statistical data and an Excel spreadsheet, conduct an empirical analysis regarding the determinants of economic growth and/or conditional convergence		
Work placement	Not applicable		

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