



Subject card

Subject name and code	Theories of Economic Growth and Development, PG_00067947						
Field of study	Economics						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	first-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	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		assessment		
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	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		50.0	100
Subject objectives	The aim of the course is to acquaint students with theories of economic growth and convergence. The student will be able to apply the most important models of growth and convergence theory and empirical methods used in verification of these models.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W01] demonstrates advanced knowledge and understanding of economic problems, and selects methods for resolving them while taking into account the complex interrelationships among the phenomena being analyzed.		identifies phenomena related to growth and convergence theory based on the theories learned and possible analytical methods		[SW1] Assessment of factual knowledge		
	[K6_U07] uses advanced information technologies to enhance data analysis and decision-making processes.		analyzes the theory of economic growth and convergence using statistical data and methods of empirical analysis		[SU2] Assessment of ability to analyse information		
	[K6_K03] is prepared to critically assess the knowledge they possess, which is necessary for solving cognitive and practical problems, and to supplement any gaps with opinions from external experts.		is aware of the limitations of economic growth and convergence models and is able to critically evaluate their assumptions.		[SK5] Assessment of ability to solve problems that arise in practice		
Subject contents	<p>How to measure economic growth and convergence? Sigma and beta convergence. Development polarization in the world and in Europe. History of economic growth and real convergence processes. Introduction to economic growth models 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). The role of institutions and social capital. International trade Empirical research on convergence. Price convergence - case study</p> <p>LABORATORY Practical analyses of topics discussed in lectures using real source data Introduction to databases. Measures of development. 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 the processes real convergence</p>						

Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	written test	60.0%	50.0%
	test with the use of real data and with the usage of computer	60.0%	50.0%
Recommended reading	Basic literature	<ul style="list-style-type: none">Jones Ch.I., Vollrath D. (2024). Introduction to Economic Growth, 4th ed. WWNorton.Marzec B. (2022) Wzrost gospodarczy w teorii i praktyce, PWNMalinowski G. (2016) Nierówności i wzrost gospodarczy, PWNAshraf Q.H. Weil D. (2025). Economic Growth, 4th Edition Routledge.Jones, C. I. (2016). The facts of economic growth. In Handbook of macroeconomics (Vol. 2, pp. 3-69). Elsevier.D. Romer, Makroekonomia dla zaawansowanych, PWN 2000Raporty: World Bank, UNCTAD	
	Supplementary literature	<ul style="list-style-type: none">Barro, R. J. (2012). Convergence and modernization revisited (No. w18295). National Bureau of Economic ResearchDobrinsky, R., & Havlik, P. (2014). Economic convergence and structural change: The role of transition and EU accession. WIIW Research Report 395Mankiw, Romer, Weil (1992) A Contribution to the Emirics of Economic Growth, The Quarterly Journal of Economics, vol 10 (2): 407-437Próchniak, M. (2011), Determinants of Economic Growth in Central and Eastern Europe: the Global Crisis Perspective, Post-Communist Economies, Vol. 23, No. 4, pp. 449-468.Rapacki R. & Próchniak M. (2009) Real beta and sigma convergence in 27 transition countries, 19902005, Post-Communist Economies, 21:3, 307-326Sala-i-Martin X. (1997) I Just Ran Two Million Regressions, American Economic Review, Vol. 87, No. 2, pp. 178-183.Wolszczak-Derlacz, J. (2008). Price convergence in the EUan aggregate and disaggregate approach. International Economics and Economic Policy, 5(1-2), 25-47Wolszczak-Derlacz, J. (2007) Wspólna Europa różne ceny, analiza procesów konwergencji CeDeWu	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Explain the properties of the Cobb-Douglas production function. Explain the Solow diagram. Define the differences between absolute and conditional convergence. Obtain data on production in economies and on growth factors: based on these real data conduct an analysis of the convergence of a group of economies.		
Work placement	Not applicable		

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