



## Subject card

Subject name and code	GROWTH THEORY AND CONVERGENCE, PG_00037762						
Field of study	Economic Analytics						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2022/2023		
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	2	Language of instruction			English		
Semester of study	4	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			exam		
Conducting unit	Department of Economic Sciences -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Joanna Wolszczak-Derlacz				
	Teachers		dr hab. Joanna Wolszczak-Derlacz				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	0.0	0.0	30
	E-learning hours included: 0.0						
Growth Theory and Convergence - Moodle ID: 21704 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=21704">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=21704</a>							
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	30		4.0		16.0	50
Subject objectives	Main aim of the subject is to present knowledge concerning growth theory and process of real convergence and practical ability to conduct empirical research on growth and convergence with the use of real data.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_U12] has the ability to prepare speeches in Polish and foreign languages in the field of social sciences	Student effectively describes the results of empirical growth and convergence analysis.			[SU2] Assessment of ability to analyse information [SU5] Assessment of ability to present the results of task		
	[K7_U13] can design and execute tasks entrusted to them, effectively cooperating in a team	Student analyses growth process in a team work.			[SU1] Assessment of task fulfilment		
	[K7_W07] has an in-depth knowledge on methods of social and economic phenomena description, including market information acquisition techniques and methods of analysis and modelling of economic processes	Student knows social background of growth and convergence process.			[SW1] Assessment of factual knowledge		
	[K7_W12] has a broad knowledge of the evolution of structures, institutions and socio-economic relations	Student knows types and determinants of growth and real convergence as a process taking place in integrated world.			[SW1] Assessment of factual knowledge		
	[K7_U03] can identify and analyse the causes and course of specific economic processes and phenomena as well as propose solutions based on them	Student is able to conduct analysis of economic growth and real convergence with the use of statistical data			[SU4] Assessment of ability to use methods and tools		

Subject contents	<p>Lectures:</p> <ol style="list-style-type: none"> <li>1. Introduction + Key concepts: measuring growth and convergence</li> <li>2. Polarization of development in the world +History of real convergence process</li> <li>3. Production function, Technology. Tools for analysis.</li> <li>4. Solow model (1) - basics</li> <li>5. Solow model (2) analitics</li> <li>6. Solow model (3) analitics</li> <li>7. Solow model extensions (1) : productivity, technological progress, growth accounting</li> <li>8. Solow model extensions (2) productivity, technological progress, growth accounting</li> <li>9. Population in economic growth and convergence models</li> <li>10. Endogenous growth models (human capital, innovations, institutions)</li> <li>11. Empirical models of economic growth and convergence</li> <li>12. Nominal convergence analysis (prices, wages).</li> <li>13. Growth, convergence and inequality</li> <li>14. Summary and review</li> </ol> <p>Computer labs: practical analysis of topics discussed during the lectures, the use of real statistical data.</p> <p>Introduction to databases. Measures of growth. Mathematical and statistical measures of convergence. Economic growth and real convergence - empirical analysis. Growth models. Role of endogeneous factors of growth in the convergence process.</p>											
Prerequisites and co-requisites	Knowledge of basic macroeconomic concepts and statistics.											
Assessment methods and criteria	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Subject passing criteria</th> <th style="width: 30%;">Passing threshold</th> <th style="width: 30%;">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td>practical lab assessment</td> <td>60.0%</td> <td>50.0%</td> </tr> <tr> <td>written assessment</td> <td>60.0%</td> <td>50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	practical lab assessment	60.0%	50.0%	written assessment	60.0%	50.0%
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written assessment	60.0%	50.0%										
Recommended reading	Basic literature	<p>Jones Ch.I., (2020), <i>Introduction to Economic Growth</i>, W.W. Norton &amp; Company  Weil D., (2014) <i>Economic Growth</i>, Pearson International Edition</p>										
	Supplementary literature	<p>Barro R.J.(1991), Economic Growth in a Cross Section of Countries, <i>The Quarterly Journal of Economics</i>, 1991, No. 106(2): 407-443. <a href="http://www.econ.nyu.edu/user/debraj/Courses/Readings/BarroGrowth.pdf">http://www.econ.nyu.edu/user/debraj/Courses/Readings/BarroGrowth.pdf</a>  Barro, R. J. (2012). Convergence and modernization revisited (NBER WP No. 18295). National Bureau of Economic Research. <a href="http://cdi.mecon.gov.ar/doc/nber/w18295.pdf">http://cdi.mecon.gov.ar/doc/nber/w18295.pdf</a>  Mankiw, Romer, Weil (1992) A Contribution to the Empirics of Economic Growth <i>The Quarterly Journal of Economics</i>, vol 107 (2): 407-437  Rodrik, D. (2011). The future of economic convergence (NBER WP No. 17400). National Bureau of Economic Research. <a href="http://bishop.hul.harvard.edu/bitstream/handle/1/5131504/RWP11-033_Rodrik.pdf?sequence=1">http://bishop.hul.harvard.edu/bitstream/handle/1/5131504/RWP11-033_Rodrik.pdf?sequence=1</a>  Solow R. (1956) A Contribution to the Theory of Economic Growth, <i>Quarterly Journal of Economics</i> 70 65-94.  Wolszczak-Derlacz J. Convergence or divergence in the European Union in: <i>Selected economic problems</i> (ed.) Gawrycka M., Technical University of Gdańsk.</p>										
	eResources addresses											
Example issues/ example questions/ tasks being completed	<p>Define the differences between absolute and nominal convergence.</p> <p>What are the endogenous factors of growth?</p> <p>Explain the Solow diagram</p> <p>Based on the real data from Eurostat, verify the real convergence process of EU regions</p>											
Work placement	Not applicable											