



Subject card

Subject name and code	Basis for new materials technologies, PG_00039713						
Field of study	Materials Engineering, Materials Engineering, Materials Engineering						
Date of commencement of studies	February 2023		Academic year of realisation of subject		2023/2024		
Education level	second-cycle 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	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		1.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Solid State Physics -> Faculty of Applied Physics and Mathematics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Aleksandra Mielewczyk-Gryń				
	Teachers		dr hab. inż. Aleksandra Mielewczyk-Gryń				
			dr hab. Agata Lisińska-Czekaj				
			dr hab. inż. Łukasz Piszczyk				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	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	30		0.0		0.0	30
Subject objectives	The aim of the lecture is to familiarize students with new trends in materials engineering.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K7_K01		Student understands the necessity of constant education		[SK4] Assessment of communication skills, including language correctness		
	K7_U01		Students knows how to utilize multiple sources of information		[SU5] Assessment of ability to present the results of task [SU2] Assessment of ability to analyse information		
	K7_W07		Student has extensive knowledge on the trends in materials engineering		[SW1] Assessment of factual knowledge		
Subject contents	- materials in army; - intelligent materials - transparent ceramics						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	exam II		50.0%		33.4%		
	exam III		50.0%		33.3%		
	exam I		50.0%		33.3%		

Recommended reading	Basic literature	<p>Renewable and Sustainable Energy Reviews, Volume 60, July 2016, Pages 394-407</p> <p>Biochemical and Biophysical Research Communications, Volume 468, Issue 3, 18 December 2015, Pages 442-453</p>
	Supplementary literature	none
	eResources addresses	<p>Adresy na platformie eNauczenie:</p> <p>Podstawy nowych technologii materiałowych 2023/2024 - Moodle ID: 35998</p> <p>https://enauczenie.pg.edu.pl/moodle/course/view.php?id=35998</p>
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	