GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Physics, PG_00029466		
Field of study	Mathematics		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2024/2025
Education level	first-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	3	Language of instruction	Polish
Semester of study	5	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Atomic, Molecular and Optical Physics -> Faculty of Applied Physics and Mathematics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Patrycja Stefańska-Ptaszek	
	Teachers	dr inż. Patrycja Stefańska-Ptaszek	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	15.0	30.0	0.0	0.0	60

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	60	5.0	35.0	100

Subject objectives

Basic knowledge of physics. Ability to use basic physical laws. Ability to interpret basic physical phenomena.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K6_U06	As part of numerical exercises, the student applies knowledge of the function integration.	[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment
K6_U09	Student is able to solve physical problems as part of the classes	[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment
K6_W03	As part of the course, the student gains knowledge about selected physical laws, theories, measurement methods, is able to explain and describe them.	[SW1] Assessment of factual knowledge
K6_U05	Student is able to analyze and interpret physical phenomena, describe them mathematically and derive appropriate physical relations.	[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment

Subject contents

Mechanics

Geometrical and wave optics

Thermodynamics

Selected topics of contemperary physics

Prerequisites and co-requisites

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	final exam	50.0%	45.0%
	classes	50.0%	35.0%
	laboratories	50.0%	20.0%
Recommended reading	Basic literature	D. Halliday, R. Resnick and J. Walker "Podstawy fizyki" PWN tom 1-5 "Feynmana Wykłady z Fizyki" PWN Warszawa	
	Supplementary literature	Paul G. Hewitt "Fizyka wokół nas" PWN Warszawa	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Conservation of energy, momentum and angular momentum.Simple harmonic motion.Longitudinal wave energy density.Interference phenomenonOhm's lawLensmaker's equation		
Work placement	Not applicable		