

Subject card

Subject name and code	Fundamentals of theoretical physics for medical physics II, PG_00155883						
Field of study	Medical Physics						
Date of commencement of studies	October 2024		Academic year of realisation of subject		2026/2027		
Education level	undergraduate 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	3		Language of instruction		Polish not applicable		
Semester of study	5		ECTS credits		5.0		
Learning profile	academic		Assessment form				
Conducting unit	Faculty of Mathematics, Physics and Informatics -> Rektor						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Marcin Łobejko				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	30.0	0.0	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		0.0		90.0	150
Subject objectives	not applicable						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[FIZMEDL3_W01] has general knowledge of basic physical concepts, principles and theories, understands their historical development and importance not only for physics, but also for science and life sciences and knowledge of the world	not applicable	[SW4] test/exam - oral or written [SW3] text preparation/written work
	[FIZMEDL3_W02] understands the role of physical experiment, mathematical theoretical models approximating reality and computer simulations in the methodology of scientific research; is aware of technological, apparatus and methodological limitations in scientific research	not applicable	[SW4] test/exam - oral or written [SW3] text preparation/written work
	[FIZMEDL3_W07] has knowledge of the basic phenomena and laws of geometric optics, wave optics and photometry	not applicable	[SW4] test/exam - oral or written [SW3] text preparation/written work
	[FIZMEDL3_W09] has knowledge about the elementary components of matter and the types of fundamental interactions between them, about the manifestations of these interactions in phenomena occurring on various scales, from subatomic to astronomical, knows the time and energy scales related to these phenomena	not applicable	[SW4] test/exam - oral or written [SW3] text preparation/written work
	[FIZMEDL3_W10] knows the basic computational methods used in classical mechanics, electrodynamics, quantum mechanics and statistical physics	not applicable	[SW4] test/exam - oral or written [SW3] text preparation/written work
	[FIZMEDL3_U01] can formulate basic physical laws using mathematical formalism	not applicable	[SU3] text preparation/written work [SU4] test/exam - oral or written
	[FIZMEDL3_U06] can use the formalism of quantum physics to describe physical phenomena in the microworld	not applicable	[SU3] text preparation/written work [SU4] test/exam - oral or written
	[FIZMEDL3_K01] knows the limitations of his own knowledge and understands the need for further education	not applicable	[SK3] text preparation/written work [SK4] test/exam - oral or written
Subject contents	not applicable		
Prerequisites and co-requisites	not applicable		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	not applicable	51.0%	50.0%
	not applicable	51.0%	50.0%
Recommended reading	Basic literature	not applicable	
	Supplementary literature	not applicable	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	not applicable		
Work placement	Not applicable		

Document generated electronically. Does not require a seal or signature.