



Subject card

Subject name and code	Selected aspects of cardiology, PG_00023327						
Field of study	Medical and Mechanical Engineering, Medical and Mechanical Engineering						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2021/2022		
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			1.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Institute of Mechanics and Machine Design -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. lek.med. Janusz Siebert				
	Teachers		prof. dr hab. lek.med. Janusz Siebert				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	15.0	15
	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	15	3.0		7.0	25	
Subject objectives	Diagnostic tools in cardiology						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K6_U10	Student can evaluate the diagnostic information as a medical engineer			[SU2] Assessment of ability to analyse information		
	K6_K02	1. shows respect towards the patient and understanding of the ideological and cultural differences 2. complies with the medical secrecy obligation and honours all patient's rights			[SK4] Assessment of communication skills, including language correctness		
	K6_U11	Has ability to use ICG, ECG, USG, echocardiography			[SU4] Assessment of ability to use methods and tools		
	K6_W12	Can describe the main field of medicine. Has knowledge about the diagnostic methods in cardiology			[SW2] Assessment of knowledge contained in presentation		

Subject contents	<p><i>Diagnostic tools in cardiology</i></p> <ol style="list-style-type: none"> 1. <i>Basic concepts of electrocardiography /ECG/</i> 2. <i>Basic concepts of impedance cardiography /ICG/.</i> 3. <i>Basic concepts of echocardiography.</i> 4. <i>Basic concepts of ultrasonography</i> 5. <i>Basic concepts of electrotherapy /pacemaker therapy (AAI, VVI, DDD)/</i> 6. <i>Invasive procedures in cardiology / PTCA/</i> 7. <i>Principles of cardiosurgery</i> 		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Essej	60.0%	100.0%
Recommended reading	Basic literature	<p><i>Seminar multimedia presentations updated yearly</i></p> <p>1. <i>"ECGs by Example" Dean Jenkins, Stephen Gerred, Elsevier, 3rd edition, 2011,</i></p>	
	Supplementary literature	<p>B. Supplementary literature <i>Guidelines of the European Society of Cardiology (ESC) -</i> www.escardio.org</p>	
	eResources addresses		
Example issues/ example questions/ tasks being completed	<p>Physical principles of ECG</p> <p>Physical principles of USG</p> <p>Pacemarcer therapy</p>		
Work placement	Not applicable		