



Subject card

Subject name and code	Human Anatomy, PG_00055731						
Field of study	Mechanical and Medical Engineering						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2021/2022		
Education level	first-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	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			2.0		
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		Jerzy Dziewiątkowski				
	Teachers		Jerzy Dziewiątkowski				
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						
Adresy na platformie eNauczanie:							
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		1.0		19.0	50
Subject objectives	Mastering the knowledge of the structure and functioning of the human body.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U01] he/she is able to acquire knowledge and self-studying, he/she is able to find needed information in specialist books, databases and other sources, he/she is able to integrate information and draw conclusions, he/she is able to communicate by using different technics in work and outside		The student is able to find the necessary information in professional literature, databases and other sources, as well as integrate information and formulate conclusions.		[SU2] Assessment of ability to analyse information		
	[K6_W02] he/she has physics skills in the field of classical mechanics, acoustics, optics, electricity, magnetism, quantum physics and medical physics		The student describes the structure of individual organs and the systems they create. The student knows the structure and functioning of the eyesight and hearing organs. The student knows the physiological basis of muscle action and the action of muscles on joints. The student knows the structure and functioning of integrative systems - the circulatory system and the nervous system.		[SW1] Assessment of factual knowledge		
[K6_U05] he/she is able to use analytic and modelling methods to formulate and solve engineering tasks related to the mechanical-medical area		The student knows the basic anatomical nomenclature. The student is aware of the role that organs play in these systems and the role of these systems for the functioning of the whole organism.		[SU3] Assessment of ability to use knowledge gained from the subject			

Subject contents	Skeletal system - general bone structure; skeleton of the limbs. Articular system - bone connections; ligaments. Muscular system - the muscles of the limbs; innervation of muscle groups. Fundamentals of the physiology of muscle activity. Mechanics of joints and the action of muscles on joints. Axial skeleton. Spine and chest. Torso and back muscles. Diaphragm. The mechanics of breathing. Somatic nervous system - structure of the spinal nerve; ganglia and nerves. Circulatory system I. Heart; heart conducting system; coronary vessels. Cardiovascular system II. General diagram of the circulatory system. Respiratory system. Alimentary system I. Alimentary canal. Digestive system II. The great glands of the digestive tract. Portal circulation. Genitourinary system. Head I. Skull; Venous sinuses of the dura mater. The muscles of the head. Temporomandibular joint. Cranial nerves: V; VII; IX; X; XI; XII. Head II. Sensory organs - eye; ear. Cranial nerves: I; II; III; IV; VI; VIII. Central nervous system - structure. Basic functional systems		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Colloquium	60.0%	100.0%
Recommended reading	Basic literature	Anatomia człowieka. Woźniak. Wyd 3. Red. M.Bruska, B.Ciszek, Edra 2019	
	Supplementary literature	Anatomia Nettera do kolorowania JT.Hansen. Edra 2015	
	eResources addresses		
Example issues/ example questions/ tasks being completed	Name the movements performed in the individual joints. Name the muscle groups that perform these types of movements. Describe the symptoms resulting from the loss of functions of individual muscle groups or damage to specific nerves.		
Work placement	Not applicable		