



Subject card

Subject name and code	Work Safety and Ergonomics, PG_00005043						
Field of study	Medical and Mechanical Engineering, Mechanical and Medical Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2021/2022		
Education level	first-cycle studies		Subject group		Humanistic-social subject group		
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 Machine Design and Vehicles -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Ryszard Woźniak				
	Teachers		dr inż. Sławomir Sommer				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	0.0	0.0	15
	E-learning hours included: 0.0						
	Adresy na platformie eNauczanie: Bezpieczeństwo pracy i ergonomia, WIMiO, IMM, I st., 3 sem. stacjonarne, (PG_00005043), semestr zimowy 2021/2022, prowadzący: Sławomir Sommer - Moodle ID: 20431 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=20431						
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		1.0		9.0	25
Subject objectives	Acquisition of basic knowledge in the area of work safety and ergonomics – BPiE.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	K6_U06	The student explains the concept ergonomics. He describes her goals about areas of application. defines man-machine layout environment. Designs the environment man's work taking attention to design principles. Applies different human models. Presents safety and reliability of the human system - machine - surroundings. Shows machine information.	[SU1] Assessment of task fulfilment
	K6_W11	The student explains the concept ergonomics. He describes her goals about areas of application. defines man-machine layout environment. Designs the environment man's work taking attention to design principles. Applies different human models. Presents safety and reliability of the human system - machine - surroundings. Shows machine information.	[SW3] Assessment of knowledge contained in written work and projects
	K6_K02	The student explains the concept ergonomics. He describes her goals about areas of application. defines man-machine layout environment. Designs the environment man's work taking attention to design principles. Applies different human models. Presents safety and reliability of the human system - machine - surroundings. Shows machine information.	[SK2] Assessment of progress of work
	K6_U12	The student explains the concept ergonomics. He describes her goals about areas of application. defines man-machine layout environment. Designs the environment man's work taking attention to design principles. Applies different human models. Presents safety and reliability of the human system - machine - surroundings. Shows machine information.	[SU1] Assessment of task fulfilment
Subject contents	Definitions of ergonomics, their purposes and application area. Description of man - machine - environment configuration. Conception of balanced development. Environmental management system. Model of man and it's characteristics. Man capabilities versus industrial processes. Environment of working man - circle conditions. Designs principles of environment of working man. Safety and reliable man - machine - environment configuration. Information acquisition of machines.		
Prerequisites and co-requisites	Knowledge of Physics (High School level).		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	No requirements	50.0%	100.0%
Recommended reading	Basic literature	1. Koradecka D.: "Bezpieczeństwo pracy i ergonomia", tom I i II. CIOP, Warszawa, 1997. 2. Hempel L.: "Człowiek i maszyna - techniczny model współdziałania", materiały własne, 1984. 3. Wykowska M.: "Ergonomia", Wyd Akademii Górniczo-Hutniczej w Krakowie, Kraków, 1994.	
	Supplementary literature	No requirements	
	eResources addresses	Bezpieczeństwo pracy i ergonomia, WIMiO, IMM, I st., 3 sem. stacjonarne, (PG_00005043), semestr zimowy 2021/2022, prowadzący: Sławomir Sommer - Moodle ID: 20431 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=20431	

Example issues/ example questions/ tasks being completed	Biomechanical analysis of the process and the workplace. The physical capacity of the human body. System Diagram man - technical object.
Work placement	Not applicable