GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Work Safety and Ergonomics, PG_00005043						
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	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						
	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	

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