GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Occupational Safety and Health and Ergonomics, PG_00041979		
Field of study	Power Engineering, Power Engineering, Power Engineering, Power Engineering, Power Engineering		
Date of commencement of studies	October 2020	Academic year of realisation of subject	2020/2021
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study Humanistic-social subject group
Mode of study	Full-time studies	Mode of delivery	e-learning
Year of study	1	Language of instruction	Polish
Semester of study	1	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. Ryszard Woźniak	

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: 15.0

Adresy na platformie eNauczanie:
Occupational Safety and Health and Ergonomics - Moodle ID: 6074
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=6074

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	2.0	8.0	25

Subject objectives

Gaining basic knowledge of ergonomics and occupational health and safety.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_K71] is conscious of the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	The student explains the concepts of ergonomics. It describes its goals and area of application. Defines the human - machine - environment system. Designs a human work environment taking into account design principles. Applies different human models. Presents the safety and reliability of the human-machine-environment system. Student presents information on machines.	[SK5] Assessment of ability to solve problems that arise in practice
[K6_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems in a social environment	The student explains the concepts of ergonomics. It describes its goals and area of application. Defines the human - machine - environment system. Designs a human work environment taking into account design principles. Applies different human models. Presents the safety and reliability of the human-machine-environment system. Student presents information on machines.	[SU4] Assessment of ability to use methods and tools

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.

<table>
<tr><td>Prerequisites and co-requisites</td><td colspan="3">Knowledge of Physics (High School level).</td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="3"><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td>End test</td><td>50.0%</td><td>100.0%</td></tr></table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td colspan="2">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.</td></tr>
<tr><td>Supplementary literature</td><td colspan="2">No requirements</td></tr>
<tr><td>eResources addresses</td><td colspan="2">Occupational Safety and Health and Ergonomics - Moodle ID: 6074
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=6074</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="3">1) definitins of ergonomics

2) human models</td></tr>
<tr><td>Work placement</td><td colspan="3">Not applicable</td></tr>
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