



MODULE SPECIFICATION

Module code	
Module title in Polish	Bezpieczeństwo pracy i ergonomia
Module title in English	Occupational Safety and Ergonomics
Module running from the academic year	2016/2017

A. MODULE IN THE CONTEXT OF THE PROGRAMME OF STUDY

Field of study	Environmental Engineering
Level of qualification	first cycle (first cycle, second cycle)
Programme type	academic (academic/practical)
Mode of study	full-time (full-time/part-time)
Specialism	All
Organisational unit responsible for module delivery	
Module co-ordinator	Lidia Dąbek, PhD hab., Professor of the University
Approved by:	Lidia Dąbek, PhD hab., Professor of the University

B. MODULE OVERVIEW

Module type	core module (core/programme-specific/elective HES*)
Module status	compulsory module (compulsory/optional)
Language of module delivery	Polish, English
Semester in the programme of study in which the module is taught	semester 1
Semester in the academic year in which the module is taught	winter semester (winter semester/summer semester)
Pre-requisites	None (module code/module title, where appropriate)
Examination required	(Yes/No)
ECTS credits	1

* elective HES – elective modules in the Humanities and Economic and Social Sciences



Politechnika Świętokrzyska

WYDZIAŁ INŻYNIERII ŚRODOWISKA, GEOMATYKI I ENERGETYKI

Mode of instruction	lectures	classes	laboratories	project	others
Total hours per semester	15				



C. LEARNING OUTCOMES AND ASSESSMENT METHODS

Module aims	The aim of the module is to familiarise students with basic OHS principles, hazards concerning workstands and the methods of protecting against these hazards. Other aims include the following: familiarising students with basic notions and principles in ergonomics (including the man-machine system); learning and mastering the abilities of organising a computer workstand according to the principles of ergonomics.
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Module outcome code	Module learning outcomes	Mode of instruction (l/c/lab/p/ others))	Corresponding programme outcome code	Corresponding discipline-specific outcome code
W_01	A student has knowledge on the following notions: technical safety, work hygiene, and legal work protection.	I	IŚ_W18	T1A_W02 T1A_W07 T1A_W08
W_02	A student has acquired the hazards occurring at workstands; moreover, a student knows harmful and arduous factors (including work at heights, underground work and manual handling).	I	IŚ_W01 IŚ_W07	T1A_W01; T1A_W02 T1A_W03 T1A_W08
W_03	A student has learnt the principles and directions of ergonomics; the principles connected with the man-machine system; a student is also knowledgeable about constrained measures in designing and organising workstands.	I	IŚ_W15	T1A_W06
U_01	A student has acquired the abilities of appropriate manual lifting and carrying loads.	I	IŚ_U03	T1A_U02; T1A_U08
U_02	A student is capable of differentiating the types of job-related accidents as well as accidents and diseases occurring in special cases.	I	IŚ_U03	T1A_U02; T1A_U08
U_03	A student can correctly organise a computer workstand.	I	IŚ_U12	T1A_U08; T1A_U09
K_01	A student is aware of the effects of incorrectly organised workstand.	I	IŚ_K04	T1A_K04
K_02	A student understands the necessity of protecting human health against hazards during work.	I	IŚ_K04	T1A_K04

Module content:

1. Topics to be covered in the lectures

No.	Topics	Module outcome code
1	The essence of OHS: technical safety, work hygiene, and legal protection of work.	W_01 K_01
2	The duties of an employer in terms of OHS: the organisation of workstands, risk assessment (and limiting it), the safety of machines and devices.	W_01 K_02
3	Internal transport as well as safety during work at heights and underground.	W_02 W_03 U_01
4	Dangerous, harmful, and arduous factors in the working environment (including physical, chemical, biological, and psychophysical).	W_01



		W_02 U_02
5	Work accidents and occupational diseases (including the types of accidents and occupational diseases together with behaviour procedures in the event of their occurrence).	W_01 W_02 K_02 U_02
6	Ergonomics – basic notions. Corrective and conceptual ergonomics. Ergonomics in designing and the principle of limited measurements.	W_03 U_03 U_01
7	Ergonomic man-environment and man-machine system; signalling elements and control devices. The possibilities of a man in relations to the possibilities of a machine.	W_03 U_03 U_01
8	A computer workstation in terms of ergonomic solutions.	U_03 U_01 W_03

2. Topics to be covered in the classes
3. Topics to be covered in the laboratories

Assessment methods

Module outcome code	Assessment methods <i>(Method of assessment; for module skills – reference to specific project, laboratory and similar tasks)</i>
W_01	A test
W_02	A test
W_03	A test
U_01	A test
U_02	A test
U_03	A test
K_01	A test
K_02	A test

D. STUDENT LEARNING ACTIVITIES

ECTS summary		
	Type of learning activity	Study time/ credits
1	Contact hours: participation in lectures	15
2	Contact hours: participation in classes	
3	Contact hours: participation in laboratories	
4	Contact hours: attendance at office hours (2-3 appointments per semester)	2
5	Contact hours: participation in project-based classes	
6	Contact hours: meetings with a project module leader	
7	Contact hours: attendance at an examination	
8		
9	Number of contact hours	17 <i>(total)</i>
10	Number of ECTS credits for contact hours <i>(1 ECTS credit = 25-30 hours of study time)</i>	0,68



11	Private study hours: background reading for lectures	5
12	Private study hours: preparation for classes	
13	Private study hours: preparation for tests	3
14	Private study hours: preparation for laboratories	
15	Private study hours: writing reports	
16	Private study hours: preparation for a final test in laboratories	
17	Private study hours: preparation of a project/a design specification	
18	Private study hours: preparation for an examination	
19		
20	Number of private study hours	8 <i>(total)</i>
21	Number of ECTS credits for private study hours <i>(1 ECTS credit = 25-30 hours of study time)</i>	0,32
22	Total study time	25
23	Total ECTS credits for the module <i>(1 ECTS credit = 25-30 hours of study time)</i>	1
24	Number of practice-based hours <i>Total practice-based hours</i>	
25	Number of ECTS credits for practice-based hours <i>(1 ECTS credit = 25-30 hours of study time)</i>	

E. READING LIST

References	
Module website	