STUDY MODULE DESCRIPTION FORM

Name of the module/subject	Code
(-)	**1011104241011126778**

Field of study	Profile of study (general academic, practical)	Year /Semester
Logistics - Part-time studies - First-cycle	**(brak)**	**2 / 4**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
-	**Polish**	**elective**

Cycle of study:	Form of study (full-time,part-time)
First-cycle studies	**part-time**

No. of hours	No. of credits
Lecture: **16** Classes: **-** Laboratory: **14** Project/seminars: **-**	**4**

Status of the course in the study program (Basic, major, other)	(university-wide, from another field)
(brak)	**(brak)**

Education areas and fields of science and art	ECTS distribution (number and %)
technical sciences	**4 100%**
Technical sciences	**4 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Student defines and characterizes basic terms from the area of natural science that relate to the functioning of the natural environment; basic technologies in production processes, chosen terms from the area of management science, ideas and objectives of ergonomics
2	**Skills**	Student is able to interpret changes occurring in the natural environment and work environment, knows how to apply methods of studying phenomena and dependencies between them, as well as he uses logical reasoning in purpose of correlating and evaluating observed phenomena
3	**Social competencies**	Student is aware of the role of problems related with the natural environment and he is willing to participate in the process of shaping wok conditions and the natural environment

Assumptions and objectives of the course:

The course is aimed at preparing the student for making aware choices and active fulfilling his role in his professional life while making decision that have consequences for the natural environment. The knowledge that the student obtains allows him to solve problems from the area of protection of the natural environment and problems correlated with it, which concern humanization of work.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. Has the basic knowledge necessary for solving non-technical conditionings of the engineer activity and knows principle rules of OSH in logistics - [K1A_W25]

Skills:

1. Is able to prepare individually a determined problem, unless it is enclosed within the area of the studied subject. - [K1A_U05]
2. Is able to notice system and non-technical aspects in the process of formulating and solving engineer tasks. He can also notice social and technical, organizational and economical aspects of these tasks. - [K1A_U10]
3. Is well prepared for the work in an industrial environment and knows principles of security connected with this work, including problems of security on logistics. - [K1A_U11]
4. Is able to apply proper instruments and methods for solving problems from the area of logistics and efficiently use them. - [K1A_U15]

Social competencies:

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1. The student should be sensitive to environmental and ergonomic aspects and effects of engineer activity, including responsibility for decisions he makes within frames of work conditions and environmental protection. - [K1A_K02]
2. The student should be willing to cooperate and work in a team for solving problems from the scope of ecology of human work. - [K1A_K03]
3. The student should be able to learn along all his life and to inspire and organize the process of learning for other people within frames of natural environment and work environment. - [K1A_K04]
4. The student should be responsible for the correct identification and solving dilemmas connected with the performed profession. - [K1A_K05]
5. The student should be determined to thinking and acting in the enterprising way. - [K1A_K06]
6. The student should formulate and transmit information and opinions concerning achievements of the technique and environmental and ergonomic aspects of engineering activity into the intelligible way to the society. - [K1A_K07]

Assessment methods of study outcomes

Forming assessment:

a) in classes ? current evaluation of student?s activity during classes and presentation of chosen subjects prepared by groups of students;

b) during lectures ? basing on questions asked during the lecture, which refer to previous lectures on the subject.

Final assessment

a) Reports on classes

b) Final test.

Course description

Lectures

1. Notions used in ecological studies
2. Field of interest of the human ecology
3. The human ecology but the macroergonomics - relations
4. Environmental protection in the face of problems of polluting the biosphere
5. Instruments of the environmental management
6. The concept and assumptions of the sustainable development
7. Principles, laws and indicators of the eco-development

Classes

1. Environmental aspect of the humanization of work
2. Evolution of the relation man - environment
3. Forming of the workplace in the design-investment process
4. Environmental issues in the comprehensive macroergonomic evaluation
5. Influence of humanized forms of work organization on work environment
6. Social traps but environmental issues

Basic bibliography:

1. Górka K., Poskrobko B., Radecki W., Ochrona środowiska, PWE, Warszawa 2001
2. Jabłoński J., Wybrane problemy zarządzania środowiskowego, WPP, Poznań 1999
3. Kozłowski S., Ekorozwój. Wyzwanie XXI wieku, Wydawnictwo Naukowe PWN, Warszawa 2000
4. Mateja B., Ekologia. Wybrane zagadnienia, WPP, Poznań 2011
5. Mikuła B., Człowiek a organizacja. Humanizm w koncepcjach i metodach organizacji, Wydawnictwo Antykwa, Kraków 2000
6. Tytyk E., Projektowanie ergonomiczne, Wydawnictwo Naukowe PWN, Warszawa ? Poznań 2001
7. Wolański N., Ekologia człowieka t. I, Wydawnictwo Naukowe PWN, Warszawa 2006

Additional bibliography:

1. Kowalski Z., Kulczycka J., Ekologiczna ocena cyklu życia procesów wytwórczych (LCA), PWN, Warszawa 2007
2. PN ? EN ISO 14001:2005, Systemy Zarządzania Środowiskowego
3. Ustawa z dnia 27 kwietnia 2001 r., Prawo ochrony środowiska, Dz. U. 2001, nr 62, poz.627

Result of average student's workload

Activity	Time (working hours)

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1. Lectures	16
2. Laboratory	14
3. Consultations	21
4. Preparations ...	28
5. Preparations ...	20
6. Exam ...	1

Student's workload		
Source of workload	**hours**	**ECTS**
Total workload	100	4
Contact hours	36	2
Practical activities	14	1

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