STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Ecologistics		**1011104451011142999**
Field of study	Profile of study (general academic, practical)	Year /Semester
Logistics - Part-time studies - First-cycle	**(brak)**	**3 / 5**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
-	**Polish**	**obligatory**
Cycle of study:	Form of study (full-time,part-time)	
First-cycle studies	**part-time**	
No. of hours		No. of credits
Lecture: **8** Classes: **-** Laboratory: **10** Project/seminars: **-**		**3**
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 %)

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowledge of environmental protection, logistics and organization and management sciences.
2	**Skills**	Can Interpret and describe: phenomena that affect the company, its logistic processes and environmental protection. Can assess the manner of achieving goals while maintaining good relationships with partners and co-workers.
3	**Social competencies**	Is aware of his/her knowledge of logistics, environmental protection and organization and management sciences and understands and analyses related basic social phenomena.

Assumptions and objectives of the course:

The aim of the course is to familiarize students with the nature, objectives and methods of completing ecologically-oriented logistic processes and systems of pro-ecological management of production processes.

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

Knowledge:

1. Has basic knowledge of the place and importance of environmental protection and logistics in the system of sciences and its subjective and methodological specification. - [K1A_W04]
2. Knows basic terminology from the area of environmental protection and logistics as well as organization and management, especially those related to waste management system, transportation policy and recycling. - [K1A_W07]
3. Knows and understands basic instruments of organization and management in the area of waste management and the importance and nature of pro-ecological management of production processes. - [K1A_W10]
4. Has basic knowledge of major direction of development and major achievements in the area of environmental protection and logistics and pro-ecological management of production processes. - [K1A_W07]
5. Knows historical volatility of the meaning of concepts in the area of environmental protection, logistics and pro-ecological management of production processes. - [K1A_W13]
6. Knows legal aspects of ecologically-oriented logistic processes and systems of pro-ecological management of production processes. - [K1A_W07]

Skills:

1. Notices, makes observations and interpretations of social phenomena of pro-ecological management system in logistics activities - [K1A_U13]
2. Uses theoretical knowledge to describe and analyze social processes and phenomena relating to the environmental protection and logistics - [K1A_U14]
3. Analyzes the causes of flow of processes and pro-ecological phenomena and analyses and participates in finding solutions to problems relating to the environmental protection and logistics - [K1A_U16]
4. Can use basic notions regarding environmental protection, logistics and research paradigms in typical professional situations. - [K1A_U15]
5. Can formulate, express, present and support the detailed issues of environmental protection in management and particularly in logistics - [K1A_U13]

Social competencies:

1. Is aware of his/her knowledge and skills in the area of environmental protection and logistics, and understands the need for continuous improvement - [K1A_K01]
2. Is aware of the importance of eco-friendly approach in management and daily life in maintaining and developing social and economic bonds at different levels - [K1A_K02]
3. Is prepared to actively participate in groups and organizations undertaking activities related to environmental protection and recycling of waste materials in the economy - [K1A_K03]
4. Can communicate with the environment and provide basic knowledge of environmental protection in logistics. - [K1A_K05]
5. Can complete and improve the acquired knowledge and skills - [K1A_K04]
6. Is able to take responsibility for the tasks assigned. - [K1A_K01]
7. Recognizes the importance of behaving in a professional and ethical manner - [K1A_K06]

Assessment methods of study outcomes

Written final test - lectures.

Final project - laboratories.

Course description

The course covers the following topics:

1) The Framework eco-logistics.
2) Logistics orientation on waste management system.
3) The processes of recycling waste materials in the economy.
4) Ecological balances in logistic systems.
5) Logistics of communal waste disposal.
6) Design of recycling-oriented products.
7) Environment-friendly management systems.
8) Environmental aspects of transport policy of the European Union

Basic bibliography:

1. Korzeniowski A., Skrzypek M., Ekologistyka zużytych opakowań, Instytut Logistyki i Magazynowania, Poznań, 1999.
2. Korzeń Z., Ekologistyka, Instytut Logistyki i Magazynowania, Poznań , 2001.
3. Jabłoński J., Zarządzanie środowiskowe jako warunek ekologizacji przedsiębiorstwa. próba modelu teoretycznego, WPP, Poznań, 2001.
4. J. Jabłoński (red.), Technologie "zero emisji", WPP, Poznań 2011
5. Jakowski S., Projekt nowelizacji zasad projektowania opakowań transportowych, Centralny Ośrodek Badawczo-Rozwojowy Opakowań, Warszawa , 2003.
6. Kowalski Z., Kulczycka J., Góralczyk M., Ekologiczna ocena cyklu życia procesów wytwórczych, PWN, Warszawa 2007.

Additional bibliography:

1. Górski M., Prawo ochrony środowiska, Wolters Kluwer Polska, Warszawa, 2009.
2. Kwaśnicka K., Odpowiedzialność administracyjna w prawie ochrony środowiska, Wolters Kluwer Polska, Warszawa, 2011.
3. Radecki W., Ustawa o odpadach. Komentarz. Wolters Kluwer Polska, Warszawa, 2009. 4. Ochrona środowiska przyrodniczego. Dobrzańska B., Dobrzański G., Kiełczewski D., Wydawnictwo Naukowe PWN, 2008

Result of average student's workload

Activity	Time (working hours)
1. Studying for final exam	10
2. Preparing the final project	20

Student's workload

Source of workload	hours	ECTS
Total workload	30	3
Contact hours	30	3
Practical activities	0	0