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		STUDY MODULE D	ESCRIPTION FORM	<u> </u>	
Name of the module/subject Logistics 2				Code 1011104421011110216	
Field of s			Profile of study	Year /Semester	
Logistics - Part-timo studios - First-ovolo		(general academic, practical) (brak)	1/2		
Logistics - Part-time studies - First-cycle			Subject offered in:	Course (compulsory, elective)	
Elective path/specialty -		-	Polish	elective	
Cycle of	study:		Form of study (full-time,part-time)		
	First-cyc	cle studies	part-time		
No. of ho	nurs			No. of credits	
Lecture	4.4	s: 14 Laboratory: -	Project/seminars:	- 5	
	Oldooo.	program (Basic, major, other)	(university-wide, from another		
		(brak)	• •	(brak)	
Education	n areas and fields of sci	ience and art		ECTS distribution (number	
				and %)	
Respo	onsible for subj	ect / lecturer:	Responsible for subject	ct / lecturer:	
-	ż. Piotr Cyplik		dr inż. Piotr Cyplik		
	z. Floti Cyplik il: piotr.cyplik@put.pc	oznan.pl	email: piotr.cyplik@put.poz	znan.pl	
	16653401		tel. 616653401		
-	ział Inżynierii Zarządz		Faculty of Engineering Management		
ul. St	trzelecka 11 60-965 F	Poznań	ul. Strzelecka 11 60-965 P	oznań	
Prered	quisites in term	ns of knowledge, skills an	d social competencies:		
		The student knows the basic log	gistical issues such as functiona	al separation of logistics, nature	
1	Knowledge	customer service, the nature of			
2	Skills			can use statistical formulas such	
2	SKIIIS	as the mean and statistical devi	ation.		
3	Social	there is no indication			
J					
	competencies				
Assur	nptions and obj	jectives of the course:			
Assur The cou	mptions and obj	liarize students with the most impo		nagement in terms of	
Assur The cou	mptions and objurse aims are to familident demand and tra	liarize students with the most impo aining in operational decision-mak	ing skills for reordering stock.		
Assur The cou indepen	mptions and objurse aims are to familadent demand and tra	liarize students with the most impo	ing skills for reordering stock.		
Assur The cou indepen	mptions and obj urse aims are to famil ident demand and tra Study outco ledge:	liarize students with the most imposining in operational decision-makemes and reference to the	ing skills for reordering stock. educational results for	a field of study	
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Assur The cou indepen Know 1. Stude 2. Stude function	mptions and objurse aims are to familiadent demand and tra Study outco ledge: ent has a basic knowent is able to identify all areas of logistics -	liarize students with the most imposining in operational decision-makemes and reference to the eledge of inventory management - and formulate the basic relationsh - [K1A_W14;K1A_W16;K1A_W20]	e educational results for reordering stock. E educational results for reordering stock.	a field of study	
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Know 1. Stude 2. Stude function 3. Stude Skills: 1. Stude 2. Stude	mptions and objurse aims are to familiare aims are to familiare aims are to familiare aims are to familiare aims and trace. Study outco ledge: ent has a basic knower is able to identify all areas of logistics areas of logistics areas to know the historice. ent can design a procent is able to define the	liarize students with the most imposining in operational decision-makenes and reference to the ledge of inventory management - and formulate the basic relationsh. [K1A_W14;K1A_W16;K1A_W20] call development of inventory management of the problem of renewal of stocks in the problem of renewal of stocks in	e educational results for educational results for [K1A_W14;K1A_W17;K1A_W1 nip between inventory and, store;KInzA_W05] agement - [K1A_W19] eventory management - [K1A_U n terms of demand independent	a field of study 8] age, transport and other J01;K1A_U12] - [K1A_U02]	
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Faculty of Engineering Management

Formative assessment:

a) For the laboratory: on the basis of progress in the implementation stages of the project (created in laboratory), and knowledge of the issues necessary to carry b) for the lecture: on the basis of answers to questions about the topics covered in previous lectures

Recapitulative assessment:

a) For the laboratory: on the basis of (1) the quality of the project (2) answers to questions about the project b) for the lecture: on the basis of colloquium - written work on the issues discussed during the lecture. The exam can be applied after obtaining the ratings of the project and the laboratory. The exam is passed, after giving the correct answers to most questions

Course description

The issue of course includes the following topics: functions of inventory in logistic systems (includes implementation of VMI process), classification of inventory, the structure of supply (inventory cycle, safety, surplus - identifies causes for stock obsolescence and redundancy and propose ways for minimising this), the basic elements of inventory management to cover the needs of dependent and independent (includes push/pull logic, lead time definition, product cycle vs. level of inventory management), the costs of rising, maintenance and lack of supply, demand analysis (includes method of improves the demand management process), demand forecasting (9 stages of forecasting process), definitions of customer service (CS in the demand management process), developing supply security, reordering systems inventory (optimize level of inventory), optimize inventory turnover (volume of deliveries), the square root law (safety stocks in the dispersion of stock), inventory management of product groups (includes CPFR method), measures of stock (KPI in inventory management).

Basic bibliography:

- 1. Cyplik P., Hadaś Ł., Zarządzanie zapasami w łańcuchu dostaw, Wydawnictwo Politechniki Poznańskiej, Poznań, 2012
- 2. Sarjusz-Wolski Z., Sterowanie zapasami w przedsiębiorstwie, PWE, Warszawa, 2000
- 3. Krzyżaniak S., Podstawy zarządzania zapasami w przykładach, ILiM, Poznań, 2008

Additional bibliography:

- 1. Coyle J. J., Bardi E. I., Langley J. Jr., Zarządzanie logistyczne, PWE, Warszawa, 2002
- 2. Krzyżaniak S., Cyplik P., Zapasy i magazynowanie, Tom I Zapasy, Podręcznik do kształcenia w zawodzie technik logistyk ILiM Poznań 2007

Result of average student's workload

Activity	Time (working hours)
1. Preparing for the Exam	25
2. Preparation for the laboratory and to pass project	15
3. Project realisation	42
4. Lectures	14
5. Laboratory	14
6. Project consulatation	15

Student's workload

Source of workload	hours	ECTS
Total workload	125	5
Contact hours	45	2
Practical activities	80	3