

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Logistics in Air Transportation		Code 1010621231010623536
Field of study Transport	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty Aircraft Transport	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 1 Classes: 1 Laboratory: - Project/seminars: -		No. of credits 1
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 1 100% 1 100%
Responsible for subject / lecturer: dr inż. Grzegorz Gramza email: grzegorz.gramza@put.poznan.pl tel. (61) 665 20 17 Wydział Maszyn Roboczych i Transportu ul. Piotrowo 3, 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has a basic knowledge of place of logistics and transportation at national economy, has basic knowledge in the field of mathematical methods and simulations of transportation
2	Skills	Is able to obtain information from the literature, internet, databases and other sources in Polish and English. Can integrate the information to interpret and learn from them, create and justify opinions.
3	Social competencies	Is able to identify and resolve the dilemmas associated with assignments, is able to collaborate with members of the group, Is able to point priorities important for tasks. Is self-reliant and willing to study problems.
Assumptions and objectives of the course: Get a advanced knowledge of logistics systems and air transportation systems.		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 1. Has the basic knowledge about the concepts of the logistics systems, development of logistics concepts and knowledge about management at logistics - [K2A_W22] 2. Has the basic knowledge about air transportation, management in air transportation, organization of air transportation - [K2A_W22]		
Skills: 1. is able to find informations from literature, internet, databases, other sources - [K2A_U01] 2. is able to discuss problem in his environment by means of known logistics systems - [K2A_U02] 3. is able to organize and manage process of transportation in air transportation - [K2A_U16] 4. is able to use mathematical models to simulate air transportation - [K2A_U18]		
Social competencies: 1. Understands the importance of continuous education for self-development - [K2A_K01] 2. Is able to make a decision, act to develop its company and community - [K2A_K07] 3. Is aware of importance of knowledge, is ready to share its knowledge with society - [K2A_K08]		
Assessment methods of study outcomes		

Average rating taking into account assessment of the student activity during lectures and a written final test		
Course description		
General definitions in logistics, task of logistics at air transportation, development of theories, consumer service, standards of consumer service, stock management, ABX/XYZ methodology, overall costs at air transportation, business forecast		
Basic bibliography:		
1. Beier F.J., Rutkowski K.: Logistyka. SGH, Warszawa 1993.		
2. Coyle J., Bardi E., Langley C.: Zarządzanie Logistyczne. PWE, Warszawa 2007.		
3. Praca zbiorowa: Podstawy logistyki. Biblioteka Logistyka, Poznań 2008.		
Additional bibliography:		
1. Rydzkowski W., Wojewódzka-Król K. (red.): Transport. PWN, Warszawa 1998.		
2. Stajniak M., Hajdul M., Foltyński M., Krupa A.: Transport i spedycja. Biblioteka Logistyka, Poznań 2008		
Result of average student's workload		
Activity	Time (working hours)	
1. Preparation for lectures	0	
2. Participation in the lecture	15	
3. Studying the lecture	0	
4. Consultation lecture	0	
5. Exam preparation	3	
6. Participation in the exam	1	
7. Preparation for design classes	0	
8. Participation in the project activities	15	
9. Preparation of the draft	0	
10. Consultations to design classes	1	
11. Preparing to pass	2	
12. Participation in completing	1	
Student's workload		
Source of workload	hours	ECTS
Total workload	38	1
Contact hours	33	1
Practical activities	0	0