

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Economy of Pneumatic and Hydraulic Transportation		Code 1010631261010632994
Field of study Transport	Profile of study (general academic, practical) (brak)	Year /Semester 3 / 6
Elective path/specialty Engineering of Pipeline Transport	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: - Classes: 2 Laboratory: - Project/seminars: -		No. of credits 2
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		ECTS distribution (number and %)
Responsible for subject / lecturer: dr inż. Ryszard Piątkowski email: ryszard.piatkowski@put.poznan.pl tel. 616652214 Faculty of Working Machines and Transportation ul. Piotrowo 3 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has a basic understanding of economic phenomena, including the market mechanism and specificity of decision-making in market economy
2	Skills	Student is able to associate and integrate the information, analyze the phenomena occurring in the environment, draw conclusions, formulate and justify opinions
3	Social competencies	Student is able to do a literature research and knows the rules of work group and discussion
Assumptions and objectives of the course: Acquiring of the knowledge about economics of transport , in particular about the specificity of the transport sector and operation and business of transport companies.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Has the knowledge of the basic terms related to economics of transport companies. - [K1A_W11] 2. Has the knowledge of the strategy types of enterprises operating in a market economy with particular emphasis on the specificity of the transport sector. - [K1A_W11] 3. Has the knowledge of the operational rules of transport companies. - [K1A_W21] 4. Has the knowledge of the rules governing the functionality of transport companies including the breakdown between different modes of transport - [K1A_W11] 5. Has the knowledge of the method of calculation of the selected costs relating to the transport companies - [K1A_W11]		
Skills:		
1. Is able to characterize the models of competition in the transport sector - [K1A_U01] 2. Is able to analyze the strategies of transport companies and assess their performance - [K1A_U06] 3. Is able to interpret phenomena in the transport sector in the context of their impact on the development of the market - [K1A_U01] 4. Is able to analyze the cost group occurring in companies dealing with transport services - [K1A_U09] 5. Is able to calculate what type of transport means should be chosen by a company - [K1A_U16] 6. Is able to calculate the depreciation of means of transport - [K1A_U16]		
Social competencies:		

1. Understands the importance of the operation of transport companies to address social needs and to support economy as a whole - [K1A_K02]
2. Is able to develop his knowledge in the field of transportation economics - [K1A_K01]
3. Is able to apply his knowledge to practical purposes in relation to the activities of transport companies. - [K1A_K03]

Assessment methods of study outcomes

Partial evaluation:

Lectures - assessment of the student activity during lectures

Classes - assessment of the student activity during classes and presentations of discussed topics

Final evaluation:

Lectures: Average rating taking into account assessment of the student activity during lectures and a written final test

Classes: average rating taking into account student's activity in the classes and presented topics.

Course description

Lectures:

1 Economic importance and functions of transport. The relationship between transport and the economy.

2 Strategies on the transport market. Types of strategies. Typical strategies for road transport, logistic sector and air transport.

3 Impact of the regulatory processes on the transport sector.

4 Co-operation and capital consolidation in the transport sector (strategic alliances, mergers and acquisitions)

5 Economic problems in the development of transport companies in Poland relating to the transformation associated with the functioning of the single European market.

6 Market outlook. Opportunities and threats for the development of sub-markets in the transport sector.

Classes:

1 Costs structure of transport companies. Cost of production of transport services ? total and unit transport cost calculations. The efficiency of transport services, the mechanism of concessions.

2 Prices of transport services. Principles and rules of pricing the transport services . Factors that impact on prices. Methods of pricing - contracts and tariff. Calculation of fees according to the rates and tariffs.

3 Leasing of transport means: Calculation of fees for rental - modal approach.

4 Purchase of transport means: Calculation of the cost of purchases including the projected income, the average variable cost of producing the services and interest rates.

5 Depreciation in transport companies: Types of depreciation. The concept of depreciation. Methods of calculating depreciation - linear method and degressive method.

Basic bibliography:

Additional bibliography:

Result of average student's workload

Activity	Time (working hours)	
1. Participation in exercises	30	
2. Consultations	1	
3. Preparing to pass	15	
4. Final test	2	
Student's workload		
Source of workload	hours	ECTS
Total workload	52	2
Contact hours	32	1
Practical activities	15	1