

| <b>STUDY MODULE DESCRIPTION FORM</b>  |   |   |
|---|---|---|
| Name of the module/subject<br><b>Transport economics</b>  |   | Code<br><b>1010621271010612393</b>  |
| Field of study<br><b>Transport</b>  | Profile of study (general academic, practical)<br><b>(brak)</b> | Year /Semester<br><b>4 / 7</b>  |
| Elective path/specialty<br><b>Railway Transport</b>   | Subject offered in:<br><b>Polish</b>                            | Course (compulsory, elective)<br><b>obligatory</b>  |
| Cycle of study:<br><b>First-cycle studies</b>   | Form of study (full-time, part-time)<br><b>full-time</b>        |   |
| No. of hours<br>Lecture: <b>1</b> Classes: <b>1</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>   |   | No. of credits<br><b>2</b>  |
| Status of the course in the study program (Basic, major, other)<br><b>(brak)</b>  |   | (university-wide, from another field)<br><b>(brak)</b>  |
| Education areas and fields of science and art<br><b>technical sciences</b>  |   | ECTS distribution (number and %)<br><b>2 100%</b>   |
| <b>Responsible for subject / lecturer:</b><br>Agnieszka Merkisz-Guranowska, D.Sc.<br>email: agnieszka.merkisz-guranowska@put.poznan.pl<br>tel. 61 647 59 58<br>Faculty of Working Machines and Transportation<br>ul. Piotrowo 3 60-965 Poznań |   | <b>Responsible for subject / lecturer:</b><br>Wojciech Karpiuk, Ph.D.<br>email: wojciech.karpiuk @put.poznan.pl<br>tel. 61 665 27 05<br>Faculty of Machines and Transport<br>3 Piotrowo street, 60-965 Poznan, Poland |
| <b>Prerequisites in terms of knowledge, skills and social competencies:</b>   |   |   |
| 1   | <b>Knowledge</b>  | Student has a basic understanding of economic phenomena, including the market mechanism and specificity of decision-making in market economy  |
| 2   | <b>Skills</b>   | Student is able to associate and integrate the information, analyze the phenomena occurring in the environment, draw conclusions, formulate and justify opinions  |
| 3   | <b>Social competencies</b>                                      | Student is able to do a literature research and knows the rules of work group and discussion  |
| <b>Assumptions and objectives of the course:</b><br>Acquiring of the knowledge about economics of transport , in particular about the specificity of the transport sector and operation and business of transport companies.                  |   |   |
| <b>Study outcomes and reference to the educational results for a field of study</b>   |   |   |
| <b>Knowledge:</b>   |   |   |
| 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]   |   |   |
| <b>Skills:</b>  |   |   |
| 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]  |   |   |
| <b>Social competencies:</b>   |   |   |

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:

1. Mindur M., Wzajemne związki i zależności między rozwojem gospodarki a transportem, Wydawnictwo Instytutu Technologii Eksploatacji, Warszawa 2004.

2. Ciesielski M., Szudrowicz A., Ekonomia Transportu, Wydawnictwo Akademii Ekonomicznej w Poznaniu, Poznań 2001.

3. Stajniak M., Hajdul M., Folyński M., Krupa A., Transport i spedycja, Biblioteka Logistyki, Poznań 2005.

#### Additional bibliography:

1. Liberadzki B., Mindur L., Uwarunkowania rozwoju systemu transportowego Polski, Wydawnictwo Instytutu Technologii Eksploatacji, Warszawa -Radom 2006.

2. Marciszewska E., Pieriegud J., Benchmarking and Best Practices in Transport Sector. , Oficyna Wydawnicza SGH, Warszawa 2009.

3. Skawińska E. (ed), Wybrane problemy ekonomii, ćwiczenia z zadaniami, Wydawnictwo Politechniki Poznańskiej, Poznań 2003.

### Result of average student's workload

| Activity                           | Time (working hours) |
|------------------------------------|----------------------|
| 1. Participation in lectures       | 15                   |
| 2. Learning of lectures content    | 5                    |
| 3. Preparation for the final test  | 5                    |
| 4. Participation in the final test | 2                    |
| 5. Preparation for classes         | 5                    |
| 6. Participation in classes        | 15                   |
| 7. Learning of the classes content | 5                    |

| <b>Student's workload</b> |              |             |
|---------------------------|--------------|-------------|
| <b>Source of workload</b> | <b>hours</b> | <b>ECTS</b> |
| Total workload            | 52           | 2           |
| Contact hours             | 32           | 1           |
| Practical activities      | 15           | 1           |