# POZNARO POZNAR

#### POZNAN UNIVERSITY OF TECHNOLOGY

**EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)** 

#### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Transport economics [S1Trans1>EKONT]

Course

Field of study Year/Semester

Transport 1/1

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

15 0

Tutorials Projects/seminars

15 0

Number of credit points

2,00

Coordinators Lecturers

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## **Prerequisites**

The student has a basic knowledge of economic phenomena, including the market mechanism and the specificity of economic decision-making by entities. The student is able to associate and integrate the obtained information, analyze the phenomena occurring in the environment, draw conclusions, formulate and justify opinions. The student is able to work independently, search for information in literature, knows the rules of discussion and group work.

# Course objective

The main goal of the subject is to get students acquainted with the specificity of the transport sector functioning as well as the behavior of transport companies and the economics of their operation

## Course-related learning outcomes

#### Knowledge:

1. The student has an ordered, theoretically founded general knowledge of technology, transport

systems and various means of transport

2. The student knows the basic concepts of economics, related in particular to transport investments

#### Skills:

- 1. The student is able to obtain information from various sources, including literature and databases, both in Polish and in English, integrate them properly, interpret and critically evaluate them, draw conclusions, and exhaustively justify their opinions
- 2. The student can properly use information and communication techniques, applicable at various stages of the implementation of transport projects
- 3. The student is able to take into account in the process of formulating and solving tasks in the field of transport engineering also non-transport aspects, in particular social, legal and economic issues
- 4. The student is able to organize, cooperate and work in a group, assuming various roles in it, and is able to properly define priorities for the implementation of a task set by himself or others

#### Social competences:

- 1. The student can think and act in an entrepreneurial way, incl. finding commercial applications for the created system, taking into account not only business benefits, but also social benefits of the conducted activity
- 2. The student is aware of the social role of a technical university graduate, in particular, he/she understands the need to formulate and transfer to the society, in an appropriate style, information and opinions on engineering activities, technological achievements, as well as the achievements and traditions of the transport engineer profession

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

Lectures - the average taking into account the activity of students during the classes and a written test of the material

Tutorials - the average taking into account the tasks performed by students during the classes

## Programme content

- 1. Costs in transport companies: Costs, expenses, inputs differences. Structure of costs in transport. Costs of transport services cost calculation. Efficiency of transport service.
- 2. Prices of transport services. Factors affecting the prices of transport services. Methods of pricing contractual and tariff system. Calculation of fees depending on rates and tariffs.
- 3. Rent of transportation means: Calculation of charges for renting means of transport branch approach.
- 4. Purchase of transportation means: Calculating the costs of purchasing means of transport, incl. on the basis of the assumed income of the transport enterprise, average costs of the variables of product production, the interest rate of bank deposits, etc.
- 5. Amortization in transport companies: Types of amortization. The concept of amortization deduction. Ways of calculating amortization: linear and degressive method.

## Course topics

#### Lecture.

- 1. Introductory information basic concepts related to transport.
- 2. Supply and demand in transport.
- 3. Transport company.
- 4. Costs in transportation.
- 5. Prices in transportation.
- 6. Transportation policy.

#### **Exercises**

- 1 Technical speed, operating speed.
- 2. Freight work. Payload capacity.
- 3. Driver working time. Planning of transport resources.
- 4. Pallet payload.

- 5. Demand and elasticity of demand.
- 6. Flow and capacity of transportation networks.

## **Teaching methods**

Lecturing, Classroom discussion, Case study method, auditorium exercises

## **Bibliography**

#### Basic

- 1. Koźlak A., Ekonomika transportu. Teoria i praktyka gospodarcza. Wydawnictwo Uniwersytetu Gdańskiego. Gdańsk, 2008
- 2. Ciesielski M., Szudrowicz A., Ekonomika Transportu, Wydawnictwo Akademii Ekonomicznej w Poznaniu, Poznań 2001.
- 3. Mendyk E.: Ekonomika i organizacja transportu. WSzL, Poznań 2002. Additional
- 1. Button K. J., 1993. Transport Economics. Publisher Edward Elgar; 2nd edition. Cheltenham Glos
- 2. Liberadzki B. (red), Mindur L., Uwarunkowania rozwoju systemu transportowego Polski, Wydawnictwo Instytutu Technologii Eksploatacji, Warszawa -Radom 2006
- 3. Stajniak M., Hajdul M., Foltyński M., Krupa A., Transport i spedycja, Biblioteka Logistyki, Poznań 2005.

## Breakdown of average student's workload

	Hours	ECTS
Total workload	55	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	25	1,00