# POZNARO POZNAR

#### POZNAN UNIVERSITY OF TECHNOLOGY

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

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

Course name

Economics of Transportation [S1Trans1>AEwT]

Course

Field of study Year/Semester

Transport 3/6

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements

full-time elective

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

30 15

Tutorials Projects/seminars

0 0

Number of credit points

2,00

Coordinators Lecturers

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# **Prerequisites**

Knowledge: Has the knowledge of the basic terms related to economics of companies. Skills: The student is able to integrate the information obtained, make their interpretation, draw conclusions, formulate justify opinions, has the ability to see, associate and interpret phenomena occurring in the management of organizations Social competencies: The student is able to do a literature research and knows the rules of work group and discussion.

#### Course objective

Acquiring of the knowledge about economics of transport, in particular about the specificity of the transport sector and operation and business of transport companies.

# Course-related learning outcomes

#### Knowledge:

The student knows the basic concepts of economics, related in particular to transport investments. The student has basic knowledge of managing and running a business and knows the general principles of creating and developing forms of individual entrepreneurship.

#### Skills:

The student is able to obtain information from various sources, including literature and databases (both in Polish and in English), integrate it properly, interpret it and critically evaluate it, draw conclusions, and comprehensively justify his/her opinion.

Student is able to assess - at least in a basic scope - various aspects of the risk associated with a transport project.

#### Social competences:

The student understands that in technology, knowledge and skills very quickly become obsolete.

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.

The student correctly identifies and solves dilemmas related to the profession of a transport engineer.

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lectures: assessment of the student activity during lectures and final colloquium in the form of a test of choice (from 5 to 15 questions/tasks, min. 50%)

Laboratory classes: execution of an economic analysis, presentation of the solution to the case study.

# Programme content

- 1. Economic analysis basic terms.
- 2. Balance Sheet of transportation/logistics company
- 3. Costs in transport.
- 4 Revenue in transport.
- 5. Income statement.
- 6. Profitability analysis.
- 7. Analysis of liquidity.
- 8. Analysis of current assets.
- 9. Analysis of debt.
- 10.Sale of services
- 11. Analysis of resources.
- 12. Investment projects.

#### Course topics

- 1. Purpose and scope of economic analysis: Basic terms.
- 2. Balance Sheet: Balance sheet layout. Meaning and scope of information. Discussion of the components.
- 3. Balance sheet analysis: Vertical and horizontal analysis. Indicators of assets and capital structure.

Dynamics and structure study of assets and liabilities.

- 4. Costs in transport: Analysis of the costs. Cost breakdown according to selected criteria. Components of costs. Impact of economies of scale and experience curve on the costs.
- 5. Examples of transport and logistics costing analyses.
- 6. Revenues: Analysis of revenue. Revenue breakdown. Links between the different types of revenues.
- 7. Income statement: Income statement layout. Factors affecting the financial results. Vertical and horizontal analysis.
- 8. Profitability analysis: Analysis of return on assets, equity and sales. Basic indicators of profitability.
- 9. Analysis of liquidity: Liquidity ratios of the company. Net working capital. Construction and purpose of the cash flow statement.
- 10. Analysis of current assets: Management of working capital. Turnover ratios (assets, inventories, receivables, payables). Working capital cycle.
- 11. Analysis of debt: Debt ratios. Rules of debt structure. Debt leverage.
- 12. Sales Analysis: Analysis of sales dynamics and sales structure of transport companies.
- 13. Analysis of resources. The effectiveness of employment and fixed assets use.
- 14. Investment projects: Typical investment project evaluation. Project profitability assessment tools. 15.

# **Teaching methods**

Lecturer: multimedia presentation and discussion.

Laboratory classes: activation methods (case studies), didactic discussion

# **Bibliography**

#### Basic

- 1. Grochowski K., Analiza ekonomiczna w transporcie, Wydawnictwo Uczelniane Wyższej Szkoły Gospodarki, Bydgoszcz 2012
- 2. Zaleska M., Ocena ekonomiczno-finansowa przedsiębiorstwa przez analityka bankowego, Wydawnictwo SGH, Warszawa 2005.

#### Additional

- 1. Czekaj J., Dresler Z., Zarządzanie finansami przedsiębiorstw, Wydawnictwo Naukowe PWN, Warszawa 2008.
- 2. Gmytrasiewicz M., Karmańska A., Rachunkowość finansowa, Wydawnictwo Difin, Warszawa 2006
- 3. Kołaczyk Z., Rachunkowość przedsiębiorstw część 1 i 2, Wydawnictwo eMPi2, Warszawa 2007.

### Breakdown of average student's workload

	Hours	ECTS
Total workload	60	2,00
Classes requiring direct contact with the teacher	45	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	15	0,50