POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Economics of Transportation [N1Trans1>AEwT]

Course

Field of study Year/Semester

Transport 3/6

Area of study (specialization) Profile of study

general academic

Course offered in Level of study

first-cycle Polish

Form of study Requirements

elective part-time

Number of hours

Lecture Laboratory classes Other 0

18

Tutorials Projects/seminars

0

Number of credit points

2.00

Coordinators Lecturers

dr inż. Marcin Kiciński marcin.kicinski@put.poznan.pl

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:

- 1. Knows basic methods, techniques and tools used to solve complex engineering tasks and conduct research in a selected area of transport
- 2. Knows the economic, legal and other conditions of transport companies.
- 3. Has basic knowledge of management / running a business and individual entrepreneurship

Skills:

- 1. Can prepare and present a scientific paper in Polish and English, presenting the results of scientific research or oral presentation on specific issues in the field of transport engineering.
- 2. Is able to identify and formulate the non-transport specifications (e.g. social, legal and economic issues) of transport engineering tasks.
- 3. Has the preparation required in industrial environment, knows safety rules for the job of transport engineering.

Social competences:

- 1. Understands that in the field of transport engineering, knowledge and skills quickly become obsolete.
- 2. Understands the importance of using the latest knowledge in the field of transport engineering in solving research and practical problems.
- 3. Identifies and resolves dilemmas related to the transport engineer profession.

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	27	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	33	1,00