# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name Transport economics [S1Lot2-ORL>ET]

Course			
Field of study Aviation		Year/Semester 3/6	
Area of study (specialization) Air Traffic Organisation		Profile of study general academic	
Level of study first-cycle		Course offered in Polish	
Form of study full-time		Requirements elective	
Number of hours			
Lecture 15	Laboratory classe 0	es C O	Dther
Tutorials 15	Projects/seminars 0	3	
Number of credit points 2,00			
Coordinators		Lecturers	
dr hab. inż. Marek Waligórski prof. marek.waligorski@put.poznan.pl	PP		

#### **Prerequisites**

Knowledge: Students have basic knowledge of economic phenomena, including factors shaping the development of transport, decision-making in economics, and market mechanisms. Skills: Students can integrate and analyze information, draw conclusions, and justify opinions. Social Competencies: Students can independently search for information in literature, understand the principles of discussion and teamwork.

#### **Course objective**

To familiarize students with the fundamentals of transport economics, the specifics of aviation business operations, and management principles.

#### **Course-related learning outcomes**

Knowledge:

Understands basic economic concepts related to air transport, management, and entrepreneurship, particularly in the aviation sector.

Has the ability to self-educate using modern learning tools, such as online lectures, databases, e-books, and educational programs.

Skills:

Can analyze business strategies and apply strategic analysis tools in practice.

Can estimate different types of costs, evaluate market phenomena, assess economic growth factors, and understand the role of money in economic development.

Social Competencies:

Thinks and acts entrepreneurially, considering both business and social aspects of economic activities.

Social competences:

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lectures: Evaluation based on student engagement and a written exam. Exercises: Average grade from completed tasks during classes.

## Programme content

asic concepts of air transport economics.

Analysis of air transport operations in specific service markets and efficiency evaluation. Structure and strategy of an aviation enterprise.

Influence of external factors on aviation enterprises; market models in the transport sector. Competitive strategies and the specifics of airline and aircraft manufacturers' operations. Economic and financial analysis of aviation enterprises.

## **Course topics**

1. Costs in Transport Enterprises: Differentiation between costs, expenses, and investments; cost structure in transport; cost calculations for air transport services.

2. Pricing of Transport Services: Price-setting processes, influencing factors, pricing models, and fare systems.

3. Rental of Transport Equipment: Calculation of rental fees in different transport sectors.

4. Purchase of Transport Equipment: Cost calculations based on projected enterprise revenue, variable production costs, and interest rates.

5. Depreciation in Transport Enterprises: Types of depreciation, amortization methods (linear and declining balance), and calculation of depreciation periods for transport equipment.

## Teaching methods

none

## Bibliography

Basic:

Rucińska D., Ruciński A., Tłoczyński D., Air Transport: Economics and Organization, University of Gdańsk Publishing, 2012.

Rucińska D., Transport Services Market in Poland, Polish Economic Publishing, 2015.

Biskup K., Bukowski Z., Legal, Administrative, and Economic Conditions of Aviation Activity in Poland, Kazimierz Wielki University Publishing, Bydgoszcz 2014.

Ciesielski M., Szudrowicz A., Transport Economics, Poznań University of Economics Publishing, 2011.

Additional:

Chakuu S., Kozłowski P., Nędza M., Fundamentals of Air Transport, Academic Consortium, 2012. Biskup K., Bukowski Z., Conditions of Aviation Activity, Kazimierz Wielki University Publishing, Bydgoszcz 2016.

Mendyk E., Economics and Organization of Transport, WSzL, Poznań 2002.

Koźlak A., Transport Economics: Theory and Economic Practice, University of Gdańsk Publishing, 2008.

## 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