**University:** Technical University of Košice

Faculty: Faculty of Economics

Department: Department of Banking and Investment

Course Number: 35000453 Course Name: Selected Models and Analyses in Banking

Type, scope and method of learning activities:

Course Type: Lecture, Seminar

Recommended scope of the course content (in hours):

Full-time study (hours per week): 0,2

Part-time study (hours per semester): 0,26 Study Method:

Study Method:

Number of credits: 3

Recommended semester of study: ST

Recommended semester	Study programme	Study grade	Study Method
3.rok ST	Finance, Banking and Investment (FBI_Bc_D_en)	Bachelor	Attendance

Level of study: Bachelor

Prerequisites:

Course completion requirements:

Assessment and completion of the course: Graded credit test

Continuous assessment:

Final assessment: Student passes the final assessment and passes the examination when he or she meets the requirement to obtain at least 51% out of 100%.

During the semester, students can receive up to 100 points (100%). The students have the option of conducting 6 projects where students present their creativity, technical knowledge, a general overview as well as technical skills in writing. The teacher provides feedback to the students. Students can also obtain additional points in discussion forums to contribute to the shared knowledge pool.

**Overall assessment:** Overall assessment is the sum of the assessments obtained by students in the assessment period. The overall result is determined in accordance with the internal regulations of the Technical University in Košice. (Study Regulations, the internal regulation principles of doctoral studies)

## Learning outcomes:

The objective of the subject is to deepen knowledge in the banking area. Students will learn how they can analyse financial systems (banking and market-oriented systems), stability, competition, performance and efficiency. Attention is drawn to the presentation of methods for measuring stability, competition, performance and efficiency (relative indicators, parametrical and non-parametric methods) and the practical application of these methods for assessing banks and banking sectors. By following up on the optimal weightings or through regression analysis, we identify reasons for inefficiencies and propose recommendations for inefficient units. The subject also helps to understand the methodology for the multi-critical assessment of alternatives and how it could be used for assessing banking products. Students use theoretical knowledge to process the project on data published by the International Monetary Fund, the European Central Bank, central banks and financial institutions of selected countries. The analyses that have been performed are processed in the in-depth field, creating the opportunity for critical analysis of their results.

After the subject has been completed:

- Students gain up-to-date knowledge of the banking sector and knowledge of basic methods for analysing the financial system, methods for assessing stability, competition, performance and efficiency, and methods for multi-critical evaluation. Students use their knowledge from statistics, information, commercial and central banking, and banking operations management.

- Students learn to work with the data and financial statements and apply theoretical knowledge in processing projects based on data published by the International Monetary Fund, financial institutions, and central banks in selected countries. They can verify knowledge from different fields at the level of the chosen country or banks. They can enhance communication skills, collaboration and skills to present and communicate the results of their findings. ICT skills are also increasing here.

 Students can apply theoretical knowledge, are characterised by analytical thinking, communicate their results, and share their knowledge. The student can use theoretical knowledge when analysing financial institutions after taking good moral attitudes into account.

We employ classical education as well as alternative educational methods. Motivating methods are motivating interviews/talks, detecting the problem, exchanging views, constructive criticality, case studies, updating the education content, and students' self-assessments. Exposure and fixing methods are classic and interactive lectures, interpretation, repeating, training, and discussing experiences. Methods are focused on the acquisition, promotion and development of skills and competencies. The subject also requires methods of separate work for the student, for example, working with information resources and self-students of the relevant literature.

## Brief course content:

1. Theoretical approaches to banking. Financial and banking systems in selected countries.

2. Stability of the banking sector: Defining the terms; Indicator to evaluate the stability of the banking sector.

3. Competition in the banking sector: Defining the terms; Methods of measuring the level of competition in the banking sector.

 Banks performance and efficiency: Defining the terms; Types of efficiency; Classification of the methods for efficiency measurement; Traditional methods (ratios).

5. Non-parametric methods for efficiency measurement: Data Envelopment Analysis (CCR model; BCC model).

6. Super-efficiency; Malmquist index.

7. Parametric methods for efficiency measurement: Stochastic Frontier Approach (Cost efficiency; Profit efficiency).

8. Application of selected methods in the evaluation of efficiency in banking.

<ol> <li>Multi-criteria evaluation – methods of weight estimation. Methods of multi-criteria evaluation.</li> <li>Application of selected multi-criteria evaluation methods in the evaluation of banking products.</li> </ol>				
<b>Recommended Reference Sources:</b> CASU, B. et al.: Introduction to banking. 2022. ISBN 978-1-292-24033-6. COELLI, T.J, et all. An introduction to efficiency and productivity analysis. USA: SPRINGER, 2005. ISBN: 978-0	)387-24265-1			
Recommended optional program components:				
Languages required for the course completion:				
Notes:				
Course assessment: Total number of students assessed: 0				
A B C D E F	x			
0% 0% 0% 0% 0%	%			
<b>Teacher:</b> doc. Ing. Kristína Kočišová, PhD.				
Last modified: 01.09.2022				
Approved by: person(s) responsible for the study program				