Study program: Business Economics and Finance

Course name: Business Intelligence

Teacher(s): Arsovski S. Saša

Course status: Elective
Number of ECTS credits: 6
Requirement: Enrollment

Aim of the course

The aim of the business intelligence course is to introduce the student to the essential elements of the development of information systems, databases, modern tools and their importance for successful enterprise management. Businesses record huge amounts of data every day, but they don't make the best use of it. Knowledge discovery in data bases (data mining) is a method for finding valuable information in business databases that can improve a company's business. The objectives of the course are to familiarize students with the process of discovering knowledge in databases, most commonly used methods and software, and areas of application.

Course outcome

After passing the exam, the student will be able to: Name the essential elements of the development of information systems and databases; Explain, describe the functioning of business process management tools; Demonstrate, illustrate and interpret the basic principles of database functioning; Understand and effectively use methods for finding valuable information in business databases that can improve the business of the company; Make business decisions and create operational and strategic plans using modern information technology.

Course content

Theoretical classes

Introduction to business intelligence, Importance of business information, Aspects of information technology in the enterprise, Development of information technologies; Business intelligence, Development of business information systems, Knowledge management, Roadmap for intelligent business, Integration of business intelligence in the enterprise, Techniques for integrating business intelligence in the enterprise, Types of business intelligence applications, Organizational barriers for the application of business intelligence; Data warehouse; Data mining and Knowledge discovery; Balanced Scorecard; Olap reporting in the company; Business process management, ERP systems, Key market players.

Practice hours: Exercises

Analysis of examples from real-life situations, individual and group presentations of seminar papers, class discussions.

Reading materials/Literature

Required: Soleša, D., Carić, M. Informacione i komunikacione tehnologije, Faculty of Economics and Engineering Management, Novi Sad, 2016.

Skyrius, R. Business Intelligence: A Comprehensive Approach to Information Needs, Technologies and Cultures, Springer, 2021.

Recommended: Chan, L., Hogaboam, L., Cao, R. Applied Artificial Intelligence in Business Concept and Cases, Springer, 2022.

Grossmann, W., Rinderle-Ma, S. Fundamentals of Business Intelligence, Springer, 2015.

Efraim Turban, Ramesh Sharda, Dursun Delen, David King, Business Intelligence, 2nd Edition, 2010.

Number of teaching hours Theoretical classes: 3x15 = 45 Practice hours: 2x15 = 30

Teaching methods

Interactive teaching using Power Point presentations, presentations and discussions of seminar papers and case study analysis

Evaluation of knowledge (maximum number of points: 100)			
Pre-exam obligations	Points	Final exam	Points
Active participation in class	5	Written exam	
Practice hours	5	Oral exam	60
Preliminary exam	20		
Seminar paper	10		