UNIVERSITATEA BABEŞ-BOLYAI
BABEŞ-BOLYAI TUDOMÁNYEGYETEM
BABEŞ-BOLYAI UNIVERSITÄT
BABEŞ-BOLYAI UNIVERSITY
TRADITIO ET EXCELLENTIA

FACULTATEA DE BUSINESS IN PARTNERSHIP
Facultatea de Business

Str. Horea nr.7
Cluj-Napoca, 400174
Tel.: 0264599170
Fax: 0264590110
E-mail: secretariat.tbs@ubbcluj.ro
Site: tbs.ubbcluj.ro

SYLLABUS

Operations Issues in Supply Chain Management

Academic year 2025-2026

1. Information regarding the programme

1.1. Higher education institution	Babeş-Bolyai University
1.2. Faculty	Business
1.3. Department	Hospitality Services
1.4. Field of study	Business Administration
1.5. Study cycle	Master
1.6. Study programme/Qualification	Procurement and Supply chain management
1.7. Form of education	Full time

2. Information regarding the discipline

2.1. Name of the discipline	**Operations Issues in Supply Chain Management**					Discipline code	**IME0085**
2.2. Course coordinator	Lector dr. Emanuel-Emil Savan						
2.3. Seminar coordinator	Lector dr. Emanuel-Emil Savan						
2.4. Year of study	1	2.5. Semester	1	2.6. Type of evaluation	E	2.7. Discipline regime	Mandatory

3. Total estimated time (hours/semester of didactic activities)

3.1. Hours per week	**3**	of which: 3.2 course	**2**	3.3 seminar/laboratory	**1**
3.4. Total hours in the curriculum	42	of which: 3.5 course	28	3.6 seminar/laborator	**14**
Time allotment for individual study (ID) and self-study activities (SA)					**hours**
Learning using manual, course support, bibliography, course notes (SA)					20
Additional documentation (in libraries, on electronic platforms, field documentation)					15
Preparation for seminars/labs, homework, papers, portfolios and essays					13
Tutorship					2
Evaluations					2
Other activities:					6
3.7. Total individual study hours	**58**				
3.8. Total hours per semester	**100**				
3.9. Number of ECTS credits	**4**				

4. Prerequisites (if necessary)

4.1. curriculum	Not applicable.
4.2. competencies	Not applicable.

5. Conditions (if necessary)

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5.1. for the course	Room equipped with video-projector, computer
5.2. for the seminar /lab activities	Room equipped with video-projector, computer

6. Specific competencies acquired

Professional/essential competencies	• Enhance production workflow • Perform data analysis • Review distribution management procedures • Analyse supply chain strategies • Develop efficiency plans for logistics operations • Perform system analysis • Use methods of logistical data analysis • Identify process improvements • Consider economic criteria in decision making • Mitigate waste of resources • Assess risk factors • Perform data analysis
Transversal competencies	• think analytically • think critically • assume responsibility

7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	Developing students' knowledge and skills to understand and apply integrated planning processes within a company. The course aims to provide insights into how organizations forecast demand, plan production resources, and manage inventory to optimize operational performance.
7.2 Specific objective of the discipline	By the end of the course, students should be able to: • Understand the SIOP process – Explain the concept of Sales, Inventory & Operations Planning (SIOP) and its importance in an organization. • Analyze the impact of demand forecasting – Describe forecasting methods and evaluate how forecast accuracy affects organizational performance. • Correlate demand planning with production planning – Explain how organizations balance demand and production capacity to ensure timely deliveries and operational efficiency. • Develop efficient inventory management strategies – Explain inventory policies, set stock level targets, and propose solutions for optimization. • Apply SIOP concepts in real-world scenarios – Use case studies and practical examples to demonstrate SIOP applicability across industries. • Improve decision-making processes through functional integration.

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8. Content

8.1 Course	Teaching methods	Remarks
Introduction to Sales, Inventory & Operations Planning (SIOP)	Interactive Lecture	1
Integrating SIOP within Organizations	Interactive Lecture	1
Demand Forecasting Methods	Interactive Lecture	3
Forecast Accuracy and Organizational Performance	Interactive Lecture	1
Production Planning: Concepts and Strategies	Interactive Lecture	1
Inventory Management Policies and Strategies	Interactive Lecture	1
Decision-Making in SIOP	Interactive Lecture	1
Multi-Criteria Decision Analysis (MCDA)	Interactive Lecture	3
Case Study: Implementing SIOP in Various Industries	Interactive Lecture	1
Course Review	Interactive Lecture	1

Bibliography

Chopra, S., & Meindl, P. (2022). Supply Chain Management: Strategy, Planning, and Operation (8th Edition). Pearson.
Jacobs, F. R., & Chase, R. B. (2021). Operations and Supply Chain Management (16th Edition). McGraw-Hill.
Silver, E. A., Pyke, D. F., & Peterson, R. (2016). Inventory and Production Management in Supply Chains. CRC Press.
Hyndman, R. J., & Athanasopoulos, G. (2021). Forecasting: Principles and Practice (3rd Edition).
Makridakis, S., Spiliotis, E., & Assimakopoulos, V. (2020). Forecasting in the era of Big Data and Machine Learning. Wiley.
Chase, C. W. (2021). Demand-Driven Forecasting: A Structured Approach to Forecasting. Wiley.

8.2 Seminar / laboratory	Teaching methods	Remarks
Introduction to SIOP – Process and Benefits	Case Studies	1
Demand Forecasting – Methods and Applications	Exercises	3
Multi-Criteria Decision Analysis (MCDA) – Methods	Exercises	2
Implementing and Continuously Improving SIOP	Case Studies	1

Bibliography

Chopra, S., & Meindl, P. (2022). *Supply Chain Management: Strategy, Planning, and Operation* (8th Edition). Pearson.
Jacobs, F. R., & Chase, R. B. (2021). *Operations and Supply Chain Management* (16th Edition). McGraw-Hill.
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9. Corroborating the content of the course with the expectations of the epistemic community, professional associations and representative employers within the field of the program

The course content was developed based on a review of similar academic programs at internationally recognized universities. Additionally, the structure was aligned with current job market demands, emphasizing analytical skills and the ability to interpret and present forecasts.

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10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of final grade
10.4 Course	Accuracy and completeness of knowledge, logical coherence, application of specialized language, interpretation of concepts	Final Test	50%
10.5 Seminar/laboratory	Ability to apply learned concepts	Team Project	50%
10.6 Minimum standard of performance			
Understanding and applying fundamental concepts in practical scenarios Defining and explaining the SIOP process, its stages, and its role in an organization Knowing key forecasting methods and their impact on decision-making Planning production by identifying strategies to balance demand and capacity Applying inventory optimization principles and cost reduction strategies			

11. Labels ODD (Sustainable Development Goals)

	Label for Sustainable Development	
		

Date:
25.02.2025

Signature of course coordinator
Lector dr. Emanuel-Emil Savan

Signature of seminar coordinator
Lector dr. Emanuel-Emil Savan

Date of approval:
27.02.2025

Signature of the head of department
Conf. dr. Marius BOTA