

COURSE DESCRIPTION

University: Comenius University Bratislava	
Faculty: Faculty of Management	
Course ID: FM.KSP/022AB/16	Course title: Operations Management and Logistics
Educational activities: Type of activities: lecture / seminar Number of hours: per week: 2 / 2 per level/semester: 28 / 28 Form of the course: on-site learning	
Number of credits: 5	
Recommended semester: 6.	
Educational level: I., II.	
Prerequisites:	
Recommended prerequisites: Completed Course on Basics of Management	
Course requirements: The grade you receive for the course will be based on the following tasks. Students are obliged to write two seminary works. The evaluation consists of three parts: (1) Attendance 20%, (2) Seminary work from Operations Management 40%, (3) Seminary work from Logistics 40%. Total 100%. The final grade is derived using Comenius University Bratislava's decimal grading system based on the following scale: A = 91-100%, excellent; B = 81-90%, very good; C = 73-80%, good; D = 66-72%, satisfactory; E = 65-60%, sufficient; FX = 0-59%, insufficient.	
Learning outcomes: The aim of the course is to provide students with basic knowledge and skills from two management areas – operations management and logistics – that closely correlate. After successful completion of the course student will be able to: <ul style="list-style-type: none"> • Understand the importance and functions of operations management and explain the basic managerial terms and processes. • Apply systematic, professional, and creative approach to identify and address the problems and challenges in productivity improvement. • Understand the role of software systems for production planning and control • Understand the core concepts of digital manufacturing and digital twin. • To apply principles of sustainable manufacturing. • Understand the importance and functions of logistics and SCM. • Understand the principles of purchasing, procurement, and sourcing in logistics. • Analyze the inventory and warehouse management systems. • Describe the new approaches in logistics transportation systems. 	
Class syllabus: <ol style="list-style-type: none"> 1. Characteristics of Operations Management and Production System 2. Productivity Management 3. ERP a MES Systems 4. Digital Production System and Digital Twin 5. Sustainable Production System 	

6. Characteristics of Logistics and SCM
7. Procurement and Purchasing
8. Inventory Management
9. Warehouse Management
10. Logistics Transportation Systems

Recommended literature:**Obligatory:**

- [1] HEIZER, Jay H., RENDER, Barry, MUNSON, Chuck. Operations Management: Sustainability and Supply Chain Management. 13th edition. Harlow: Pearson, 2020. ISBN 978-1-292-29503-9.
- [2] SULLIVAN, Mac, KERN, Johannes, eds. The Digital Transformation of Logistics: Demystifying Impacts of the Fourth Industrial Revolution. Hoboken, New Jersey: Wiley-IEEE Press, 2021. ISBN 978-1-119-64640-2.
- [3] BURGHART, Stephanie, FEKETE, Milan. Risk Management of Procurement of the German Medium-Sized Industrial Companies with the Focus on Security of Supply. In: KRYVINSKA, Natalia, PONISZEWSKA-MARAÑDA, Aneta, eds. Developments in Information & Knowledge Management for Business Applications. Cham: Springer, 2022, pp. 321-359. ISBN 978-3-030-77915-3.

Recommended:

- [4] BUSCHER, Udo, LASCH, Rainer, SCHÖNBERGER, Jörn, eds. Logistics Management. Cham: Springer, 2021. ISBN 978-3-030-85842-1.
- [5] NAYYAR, Anand, KUMAR, Akshi, eds. A Roadmap to Industry 4.0: Smart Production, Sharp Business and Sustainable Development. Cham: Springer, 2020. ISBN 978-3-030-14543-9.
- The home page of the FMCU library is: <https://www.fm.uniba.sk/pracoviska/kniznica-fm-uk/>.
On this address, you can find various bibliography sources. You can also utilize web pages, like Google Scholar <https://scholar.google.com/> which is also recommended.

Languages necessary to complete the course:

English language

Notes:

The course is provided only in the summer semester.

In compliance with the regulations of the internal regulation No. 16/2017 Rector's Directive Comenius University in Bratislava Full reading of the internal regulation No. 23/2016 Rector's Directive Comenius University in Bratislava, which issues the Code of Ethics of the Comenius University in Bratislava as read in supplement No. 1, every student acquires his/her study results honestly; does not cheat and use dishonest practices during any form of assessment of his/her acquired knowledge. Cases of breaking the Code of Ethics of Comenius University can be judged as breaking the duties following from legal regulations, (...). Such judgement may be connected with enforcing accompanying legal consequences on academic, (...) disciplinary level.

In accordance with the regulations of the internal regulation No. 13/2018 approved by the Academic senate of Comenius University in Bratislava the Disciplinary Regulations of Comenius University in Bratislava for Students, a disciplinary offence of a student is any form of copying or forbidden cooperation or providing answers during written or oral examination (assessment of knowledge) or during preparation for it within the course, or using technical devices or any information carriers in other than allowed ways during written or oral evaluation of study results (assessment of knowledge) or during preparation for it within the course. Committing a disciplinary offence may lead to imposing some disciplinary precautions on the student: admonition, conditional suspension of studies or dismissal from studies.

Past grade distribution

Total number of evaluated students: 107

A	ABS	B	C	D	E	FX	M
89,72	0,0	10,28	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. Ing. Milan Fekete, PhD.**Last change:** 14.05.2022**Approved by:**