OPERATIONS MANAGEMENT

Course code	*MNG152*
Course title	*Operations Management*
Type of course	*Main*
Stage of study	*Undergraduate*
Year of study	*Third*
Semester	*Spring*
ECTS	*6; 24 hrs. of lectures, 24 hrs. of workshops; 112 hrs. of individual study*
Lecturer	*Visiting Professor Dr. Ieva Meidutė-Kavaliauskienė*
Study form	*Full-time*
Course prerequisites	*-*
Language of instruction	*English*

Course description
This course provides a general introduction to operations management, which is the management of the recurring activities of a firm. Together with finance and marketing, operations is one of the three primary functions of any firm. Students are familiarised with conceptual analyses of business processes and methods for improvement in all major areas of operations, starting with operations planning, implementation, and control, and ending with operational improvements.

Course aim
The aim of this course is to familiarise students with the principal operational issues that managers confront, and provide students with language, concepts, and tools to deal with these issues in order to gain competitive advantage through operations. Also, this course aims to develop skills for modelling and analysis for performance improvement of business processes.

Course learning outcomes

Course learning outcomes (CLO)	Learning methods	Assessment methods
CLO1. Ability to operate the main concepts, laws, and techniques of business process management	Lectures, tutorials, exercises, examples, simulation, homework assignments	Homework presentations, final examination, simulation, retake
CLO2. Ability to apply these concepts, laws and techniques in business process modelling	Lectures, tutorials, exercises, examples, simulation, homework assignments	Homework presentations, final examination, simulation, retake
CLO3 Ability to analyse the process models, and control process drivers to improve performance of any business process	Lectures, tutorials, exercises, examples, simulation, homework assignments	Homework presentations, final examination, simulation, retake
CLO4 Ability to see an organization as a system of interrelated processes	Lectures, tutorials, exercises, examples, simulation, homework assignments	Homework presentations, final examination, simulation, retake

Teaching and learning methods
Lectures, workshops, individual work by students. Activities will include participation in problem solving, giving oral presentations.

Quality management
Applying critical thinking skills. Regular group and individual feedback.

Course schedule

No.	Topics	Lecture hours	Workshop hours	Readings & exercises
1	Introduction to operations management. The basic concepts of operations management. Distinguish between different types of operation. The changing nature of operations management.	2	2	EOM* Ch.1 OMIP*** Ch. 1 GSC** Ch .1
2	Operations performance. The basis of performance measurement and performance measurement systems. Importance and purpose of performance measurement in operations.	2	2	OMIP Ch. 2
3	Operations management and strategy. Strategic positioning and operational effectiveness.	2	2	EOM Ch. 2 OMIP Ch. 3

				GSC Ch.3
4	Process technologies. The layout of process equipment. Queuing system.	2	2	EOM Ch.3 OMIP Ch. 6
5	Factors affecting service delivery system design. Designing the service delivery system. Future aspects of service delivery. Factors affecting the design of the manufacturing process. Designing the manufacturing process. Hybrid processes.	4	4	EOM Ch.4-5 OMIP Ch. 6
	Mid-term Exam: Topics 1-5			
6	Location and Layout. Process of choosing a location: general factors and specific factors influencing location decision. Basic types of layout. Layout design.	2	2	EOM Ch.6 GSC Ch.7, 10
7	Inventory management. Different type of inventory and their roles. Models and approaches for managing inventory. Inventory control system. Inventory analysis.	2	2	EOM Ch.9 GSC Ch.13
8	Key principles of Lean operations. Process synchronization and improvement. Techniques and practices of lean operations.	2	2	OMIP Ch. 10
9	Designing the supply chain/network. Managing supply chains. Developing supply chain. Reverse logistics.	4	4	EOM Ch.11 OMIP Ch. 7 GSC Ch. 4-10
10	Operations improvement. Innovation in Operations management	**2**	2	EOM Ch. 12
	Total	24	24	

* EOM - Alex Hill, Terry Hill "Essential operations management" (Second Edition)

**GSC - Dmitry Ivanov, Alexander Tsipoulanidis, Jorn Schonberger "Global Supply chain and Operations management"

***OMIP - David Barnes "Operations management: An International Perspective", Palgrave

Self-study and assessment

Assignment	Number of self-study hours	Percentage of the total grade
1. Homework assignments, (4 assignments, each accounts for 5% of the final grade)	30	20
2. Mid-Term Exam	30	30
3. Presentation	10	10
4. Final examination	42	40
Total:	**112**	**100**

1. Homework assignments will be uploaded to the e-learning system after the current lecture. The homework assignment has to be prepared before the next defense according to the timetable (in one or two weeks) and uploaded to the e-learning system a day before the workshop. Students to deliver the presentation will be selected randomly during the workshop. For the homework to be graded, it is necessary: 1) to upload it to the e-learning system, 2) to take part in the corresponding workshop, and 3) to deliver the presentation, if invited. Bonus point (up to 10% of the final mark) can be added for the active participation (questions, comments, discussions) in the workshops.
2. Mid-term covers 1-5 topics. Final exam covers topics 6–10. Dictionaries are welcome.
3. Rules for the presentation will be announced in the first lecture. The timetable will be uploaded to the e-learning system. All presentation will be done before the final lecture.
4. Retake Policy

The retake exam will cover all chapters in the course and will replace the midterm and final exam marks. It will account for 70% of the overall marks for the course.

Textbook

1. Alex Hill, Terry Hill "Essential operations management" (Second Edition), Palgrave, 2018.
2. Dmitry Ivanov, Alexander Tsipoulanidis, Jorn Schonberger "Global Supply chain and Operations management", Sringer, 2019

Additional readings

1. David Barnes "Operations management: An International Perspective", Palgrave, 2018;
2. William J. Stevenson "Operations Management", (Twelfth edition), McGraw Hill Education 2015.
3. Ravi Anupindi, Sunil Chopra et al. Managing business process flows. Pearson Prentice Hall, Upper Saddle River. 2006 (or later edition).
4. The Machine that Changed the World: The Story of Lean Production by James P. Womack, Daniel T. Jones and Daniel Roos, Harper Perennial, 1991.
5. Liker J.K. The Toyota way fieldbook, 2004 (in Lithuanian:Toyota sėkmės kelias, 2006)