

Course Title	Operations and Supply Chain Management				
Course Code	MBA 720				
Course Type	COMPULSORY				
Level	MASTER				
Year / Semester	Year 1 / Semester 4				
Teacher's Name	Christakis Charalambous/Aristidis Samitas				
ECTS	6	Lectures / week	3	Laboratories / week	1
Course Purpose and Objectives	<p>This course introduces major concepts and tools used in the design and use of operations systems in organizations. It introduces the discipline and the role the function plays in a value-creating organization. Emphasis is given both to familiarization of various production processes and service systems, and to quantitative analysis of problems/ issues arising in the management of operations.</p> <p>Businesses create value by supplying their products or services to satisfy customer demand that involves numerous activities and processes across the organization. Operations managers deal with a major issue in any business - how work gets done: setting up processes, uncovering the biggest bottlenecks, fine-tuning processes to save time and money, managing resources for smooth production of value.</p>				
Learning Outcomes	<p>Upon the successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> ▪ explain and describe the strategic importance of optimized supply chains with high efficiency. ▪ explain and describe the strategic role of procurement for the efficiency of supply chains. ▪ manage logistical issues such as purchasing, warehousing, queuing and production. ▪ simulate and optimize the elements of the logistics flow. ▪ develop policy options and perform decision analysis with regard to risk and forecasts regarding the supply and marketing strategies. 				
Prerequisites		Required			
Course Content	Strategic planning and optimized design of the location, transportation, and internal and external flows (Supply Chain Management and Demand Chain Management).				

	<p>Models and methods of decision analysis in product development, sourcing and supplier strategies, outsourcing, strategic alliances, inventory management, and forecasting.</p> <p>Mathematical models for inventory optimization, demand planning, project planning, optimization in queues, general optimization, simulation, risk, game theory, and optimization of product selection</p>								
Teaching Methodology	Tutorials, lectures, presentations, workshops, seminars, guest speakers and discussions in class.								
Bibliography	<ul style="list-style-type: none"> ▪ Jay Heizer, Barry Render, Chuck Munson, Amit Sachan (2017). Operations Management. Sustainability and Supply Chain Management. Pearson, 12th Edition. ▪ Krajewski, Samir, K. Srivastava, Manoj, K. Malhotra, Larry, P. Ritzman. (2018). Operations Management: Processes and supply chains. Pearson, 12th Edition. 								
Assessment	<table> <tr> <td>Participation</td> <td>10%</td> </tr> <tr> <td>Simulation</td> <td>20%</td> </tr> <tr> <td>Project</td> <td>30%</td> </tr> <tr> <td>Final Exam</td> <td>40%</td> </tr> </table>	Participation	10%	Simulation	20%	Project	30%	Final Exam	40%
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Language	English								