a) General			
School	ENGINEERING		
Academic unit	MECHANICAL ENGINEERING		
Level of studies	Undergraduate		
Course code	MM909E03	*Semester*	9
Course title	**Supply chain management**		

Independent teaching activities	*Weekly teaching hours*	*ECTS*
Lectures	3	4.5
Laboratory exercises	1	

Course type	Knowledge deepening/consolidation
Course category	Elective for Direction 1/2
Prerequisite courses	-
Language of instruction and examinations	Greek / English
Is the course offered to Erasmus students	Yes
Course website (url)	https://ops.mech.uniwa.gr/

b) Learning outcomes and general competences

b1. Learning outcomes

Upon successful completion of this course, the student will be able to:

- Understand fundamental concepts and definitions in supply chain management
- Understand the foundational role of distribution networks and third-party logistics
- Apply knowledge to evaluate, manage and optimise the integrated supply chain
- Familiarise with modern supply chains like energy, water, hydrogen

b2. General competences

- Decision-making
- Working independently
- Teamwork
- Working in an interdisciplinary environment
- Production of new research ideas
- Project planning and management
- Respect for the natural environment

c) Syllabus

This course provides an understanding of fundamental concepts and definitions of supply chain management. All functional areas/key components of supply chain management are studied in an integrated way emphasizing on the selection, design, implementation and operation of distribution networks, on optimal storage siting, on the role of third-party logistics. Also newly introduced concepts like reverse logistics and green logistics are analysed in respect to their role in contemporary supply chain management. Furthermore, performance indicators used in evaluation of supply chains are also covered by the course content, with special focus on forms of modern supply chains (i.e.: energy, water, hydrogen). The course concludes with case studies and real-life applications.

d) Teaching and learning methods - Evaluation

Delivery	Face-to-face, Workshops, Lab exercises, Software Labs
Use of information and communications technology	- Commercial/free/open source software - MS Teams/Moodle

	Activity	*Semester workload*
Teaching methods	Lectures	39
	Tutorials	
	Laboratory exercises	13
	Computational exercises	13
	Individual work	13
	Course total	130
Student performance evaluation	Written examination, case studies and team work assignment	

e) Suggested bibliography

1. Chopra S., Meindl P., [Γκάσσης Παύλος], 2015, "SUPPLY CHAIN MANAGEMENT [ΔΙΟΙΚΗΣΗ ΕΦΟΔΙΑΣΤΙΚΗΣ ΑΛΥΣΙΔΑΣ] ", ISBN: 9789604184651, Ed. Tziola, Greece
2. Roberta S. Russell [Τατσόπουλος Ηλίας], 2018, "PRODUCTION ORGANIZATION and SUPPLY MANAGEMENT [ΟΡΓΑΝΩΣΗ ΠΑΡΑΓΩΓΗΣ και ΔΙΟΙΚΗΣΗ ΕΦΟΔΙΑΣΜΟΥ]", ISBN: 9604185578, Ed. Tziola, Greece
3. Aït-Kadi Daoud, Chouinard Marc, Marcotte Suzanne, Riopel Diane, 2012, "SUSTAINABLE REVERSE LOGISTICS NETWORK: ENGINEERING and MANAGEMENT", ISBN: 9604185578, Ed. Wiley -ISTE
4. Lu, Meng, De Bock, Joost (Eds.), 2016, "SUSTAINABLE LOGISTICS and SUPPLY CHAINS. INNOVATIONS and INTEGRAL APPROACHES", ISBN: 9783319174198, Ed. Springer