

School of Engineering and Natural Sciences / Industrial Engineering (English)

2023 - 2024 Academic Year

SUPPLY CHAIN MANAGEMENT

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
SUPPLY CHAIN MANAGEMENT	IND3249170	Spring Semester	3+0	3	6
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Elective				
Course Coordinator	Assoc.Prof. Melis Almula KARADAYI				
Name of Lecturer(s)	Assoc.Prof. Melis Almula KARADAYI				
Assistant(s)					
Aim	To introduce the general structure of supply chains and to examine problems in supply chains				
Course Content	This course contains; What is Supply Chain and Supply Chain Management ?, Basic Problems in Supply Chain Management, Supply Chain Activities-I, Supply Chain Activities-II, Supply Chain Distribution Network Design-I, Supply Chain Distribution Network Design-II, Distribution Network Design Steps and Models-II, Distribution Network Design Stages and Models-II (Facility Location and Capacity Assignment Models), Distribution Network Design Stages and Models-III (Gravity Settlement Models), Stock Planning and Management in Supply Chains: Economic Order Quantity Model, Inventory Planning and Management in Supply Chains: Joint Ordering Models - I, Inventory Planning and Management in Supply Chains: Joint Ordering Models -II, The Importance of Coordination in Supply Chains-I, The Importance of Coordination in Supply Chains-II, Uncertainty Management in Supply Chains: Security Stocks.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
Explain the key components and concepts in a supply chain			10, 16, 9	A, E	
Predicts demand in a supply chain			10, 16, 9	A, E, G	
Performs aggregate planning in a supply chain			10, 16, 9	A, E, G	
Design the distribution network use optimization techniques			10, 16, 9	A, E, G	
Use supplier selection models			10, 12, 9	A, G	
Having knowledge about real-life supply chain management problems			13, 14, 16	F	
Teaching Methods	10: Discussion Method, 12: Problem Solving Method, 13: Case Study Method, 14: Self Study Method, 16: Question - Answer Technique, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework, F: Project Task, G: Quiz				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	What is Supply Chain and Supply Chain Management ?, Basic Problems in Supply Chain Management	Lecture Notes			
2	Supply Chain Activities-I	Lecture Notes			
3	Supply Chain Activities-II	Lecture Notes			
4	Supply Chain Distribution Network Design-I	Lecture Notes			
5	Supply Chain Distribution Network Design-II	Lecture Notes			
6	Distribution Network Design Steps and Models-II	Lecture Notes			
7	Distribution Network Design Stages and Models-II (Facility Location and Capacity Assignment Models)	Lecture Notes			
8	Distribution Network Design Stages and Models-III (Gravity Settlement Models)	Lecture Notes			
9	Stock Planning and Management in Supply Chains: Economic Order Quantity Model	Lecture Notes			
10	Inventory Planning and Management in Supply Chains: Joint Ordering Models -I	Lecture Notes			
11	Inventory Planning and Management in Supply Chains: Joint Ordering Models -II	Lecture Notes			
12	The Importance of Coordination in Supply Chains-I	Lecture Notes			
13	The Importance of Coordination in Supply Chains-II	Lecture Notes			
14	Uncertainty Management in Supply Chains: Security Stocks	Lecture Notes			
Evaluation Methods		Weight(%)			
Midterm Exam		30			
General Exam		70			

Resources
Lecture notes Chopra, S., Meindl, P., Supply Chain Management: Strategy, Planning, and Operation. ISBN-10: 0133800202, Pearson