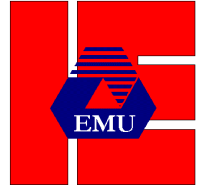




EASTERN MEDITERRANEAN UNIVERSITY
Faculty of Engineering
Department of Industrial Engineering
IENG438 – Fundamentals of Supply Chain Management
COURSE OUTLINE



COURSE CODE	IENG438	COURSE LEVEL	Third year
COURSE TITLE	Fundamentals of Supply Chain Management	COURSE TYPE	Area Elective
CREDIT VALUE	(3, 0, 0) 3	ECTS VALUE	6
PREREQUISITES	-	SEMESTER & YEAR	Spring 2021-22

Web link	https://ie.emu.edu.tr/en/department/staff/academic-staff			
	Name (group)	e-mail	Office	Telephone
Instructor	Dr. Ehsan Shakeri	Ehsan.shakeri@emu.edu.tr	C211	2821

CATALOG DESCRIPTION

Supply chain management; Performance of supply chain and its measurement; Different structures of supply chains; Planning in supply chain including demand forecasting, aggregate planning, and planning of demand and supply; Planning and managing inventories in supply chain; Information sharing; Designing and planning logistic systems of supply chain. New product development; Planning, managing and controlling of purchasing and logistics systems of supply chain; Strategic orientation toward the design and development of the supply chain; Bull-whip effect; Total Quality Management to assess and assure customer satisfaction; Global strategies; Expert systems for continuous improvement of the supply chain.

AIMS & OBJECTIVES

The main aim of this course is to provide students with the necessary modern knowledge for being able to make decisions on every level of supply chain.

Course objectives (CO):

1. The students must understand the structure of a supply chain. It also important to understand the critical points of the structure.
2. The course provides the basic knowledge of microeconomics necessary to understand the business activities in supply chain.
3. The course also provides a solid knowledge in forecasting.
4. Another aim is to give understanding of making business for engineering students.

GENERAL LEARNING OUTCOMES (COMPETENCES)

On successful completion of this course, all students will have developed **knowledge** and **understanding** of:

- Supply Chain,
- Marshall cross,
- Methods of designing supply chain,
- Inventory problems in supply chain,
- Bull whip effect,
- Transportation in supply chain,
- Other problems of logistics in supply chain,
- Market analysis for supply chain.

On successful completion of this course, all students will have developed **their skills in**:

- Analysing supply chain activities,
- Designing supply chain,
- Supporting the management of supply chain in decisions on the area of logistics.

On successful completion of this course, all students will have developed their **appreciation** of, and respect for **values and attitudes** to:

- Network design,
- Market analysis,
- Decision making in logistics.

TEXTBOOK/S

Chopra, S., & Meindl, P. (2016). *Supply Chain Management: Strategy, Planning, and Operation* (6th ed.). Pearson.

References:

Decandia, L., Lei, L., Oppenheim, R., & Zhao, Y. (2017). *Managing Supply Chain Operations*. World Scientific Publishing Company.

Charles A. Ingene, Mark E. Parry. (2004). *Mathematical Models of Distribution Channels*, Kluwer.

ASSESSMENT METHOD

Quiz 1	10% (before midterm)
Midterm	35%
Quiz 2	10% (before final)
Final	40%
Homework	5% (after midterm)

ATTENDANCE

- Attendance is mandatory. Any student who has poor attendance and/or misses an examination without providing a valid excuse may be given NG grade.
- Students missing an examination should provide a valid excuse within three days following the examination they missed. One make-up examination will be given.

COURSE CONTENT (The lecture topics within the semester are as in the following schedule although minor changes are possible)

Week	Topics
1	Basic notions in microeconomics
2	Understanding the supply chain I
3	Understanding the supply chain II
4	Supply chain drivers and metrics
5	Designing the supply chain network I
6	Designing the supply chain network II
7	Market analysis and forecasting I
8-9	Midterm Exams
10	Market analysis and forecasting II
11	Aggregate planning
12	Inventory problems in supply chain
13	The bull whip effect
14	Transportation in supply chain
15	Purchasing in supply chain
16-17	Final Exams

PLAGIARISM

This is intentionally failing to give credit to sources used in writing regardless of whether they are published or unpublished. Plagiarism (which also includes any kind of cheating in exams) is a disciplinary offence and will be dealt with accordingly.)