

IE 413
Supply Chain Management
Fall 2014

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Assistant TBA
Course schedule MTTThTh 45612 M 3120 M 3100 M 3100 M 2230 M 2230

Course web page <http://moodle.ie.boun.edu.tr/>

This course provides an introduction to basic supply chain management concepts. Focus of the course is long, mid and short-term planning functions, including inventory, production and logistics planning. Throughout the course, students will be introduced to real life scenarios, and they will be expected to use a commercial ERP system on a test case as a term project.

Prerequisite: IE 312 or equivalent

Textbook Nahmias S., *Production and Operations Analysis*, McGraw Hill, Sixth Edition, 2008.

References

- Pinedo M. *Scheduling: Theory Algorithms and Systems*. Prentice Hall. 2nd Edition. 2002.
- Silver E.A., D.F. Pyke, and R. Peterson, *Inventory management and Production Planning and Scheduling*, 3rd ed., Wiley, 1998.
- Vollmann, Berry, Whybark, Jacobs *Manufacturing Planning & Control for Supply Chain Management* . McGraw Hill. 5th Edition. 2004.
- Johnson L. A. and D. C. Montgomery. *Operations Research in Production Planning, Scheduling and Inventory Control*. Wiley and Sons. 1974.
- Hax, A. C. and D. Candea. *Production and Inventory Management*. Prentice Hall. 1984.

Grading

Midterm 1	20%	November 13, Thursday 5pm
Midterm 2	20%	December 18, Thursday 5pm
Final	30%	
Assignments (2 or 3)	15%	
Project	15%	

You need to collect a weighted average of **at least 25 points** from midterms and assignments (excluding the project) to be able to take the final exam.

Outline

1. Introduction	1	(0.5 week)	Ch. 1
2. Aggregate Planning		(2 weeks)	Ch. 3
3. Master Production Schedule (MPS)		(1 week)	Notes
4. Material Requirements Planning (MRP) and Just-in-time (JIT)		(1 week)	Notes & Ch. 7
5. Distribution Requirements Planning (DRP) and Capacity Requirements Planning (CRP)		(1 week)	Notes
6. Production scheduling		(3 weeks)	Ch. 8 & Notes
7. Inventory management and Supply Chain Contracts		(3 weeks)	Notes & Ch.5
8. Supply chain logistics planning		(2 weeks)	Notes & Ch.6