

**IE 413**  
**Supply Chain Management**  
**Fall 2009**

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**Assistants** M. Güray Güler ([guler@boun.edu.tr](mailto:guler@boun.edu.tr)) MMS Lab.  
**Course schedule** MMWWTh 56566 M 3120 M 3120 M 2230 M 2230 M 3100

**Course web page** <http://karagoz.ie.boun.edu.tr/moodle/> (enrolment key: fall09scm)

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:** IE312 or equivalent

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

## References

Pinedo M. *Scheduling: Theory Algorithms and Systems*. Prentice Hall. 2<sup>nd</sup> 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. 5<sup>th</sup> 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 18, 2009 Wednesday
Midterm 2	20%	December 16, 2009 Wednesday
Final	30%	
Quizzes + Assgn	15%	
Project	15%	

## Outline

1. Introduction	I	(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 functions		(2 weeks)	Notes & Ch.6