

# Production and Logistics Planning

KPP227



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# Learning objectives

Student shall show ability to:

- Describe production and logistics systems through a broad range of examples.
- Utilize production and logistics planning techniques to solve production and logistics problems.
- Prepare a production plan through the use of aggregate planning.
- Analyze and evaluate the solutions from production and logistics problems.
- Optimize inventory and production sequencing.
- Optimize inbound and outbound (distribution) costs through the use of transportation techniques.



# Syllabus (preliminary)

Session	Date		Contents
1	10-nov	3h	Course presentation Introduction to logistics
2	12-nov	3h	Introduction to Inl.1 Performing a literature study
3	17-nov	3h	Forecasting techniques, linear regression, Time series, Exponential smoothing
4	19-nov	4h	Capacity planning, Capacity measurement, Methods for capacity planning
5	24-nov	4h	Location, Locating a single facility, Locating a facility within a network. Transportation method
6	26-nov	4h	Layout, Process layout, Product layout, Line balancing
7	01-dec	4h	Aggregate planning, Level and chase strategies
8	03-dec	4h	Inventory management, Inventory concepts, Inventory control
9	08-dec	4h	Scheduling, Job shop dispatching, Assignment problems
10	10-dec	4h	Material requirement planning, Master production schedule Just In Time systems,
11	15-dec	4h	Q/A
12	17-dec	4h	Spare slot
	12-jan	5h	Written exam!



# Literature

**Latest edition:**

**Operations Management: Processes and Supply Chains: Global Edition, 10/e by Lee J. Krajewski, Larry P. Ritzman and Manoj K. Malhotra**



# Examination

**Project (Pro1): 1.5 credits**

Literature study (gives up to 5 bonus points for the written exam)

**Written exam (Ten1): 6 credits**



# Examination

Project (Pro1): 1.5  
Literature study

**The project demand quite an effort.  
Especially if you are less experienced in  
academic writing!**



# Communication

**Course documentation:** <http://zoomin.idt.mdh.se/course/kpp227/>

**Contact:** e-mail, [antti.salonen@mdh.se](mailto:antti.salonen@mdh.se)  
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# Attendance

**It is highly recommended that you attend as many lectures as possible!**

<b>Year</b>	<b>Attendance</b>	<b>Pass</b>
<b>2013</b>	<b>33%</b>	<b>49%</b>
<b>2014</b>	<b>67%</b>	<b>67%</b>





# Course evaluation 2014

**Overall grade: 4.5 (scale, 1-5)**

## **Pros:**

- Good lectures
- Good Powerpoint material
- Good to have a literature study as an exercise

## **Cons:**

- Long lectures
- A very large and demanding exam

## **Changes 2015:**

- More supervision opportunities for the literature study