

TOROS ÜNİVERSİTESİ

Faculty Of Engineering
Industrial Engineering (English)

Course Information

PRODUCTION MANAGEMENT					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
INE317	Fall	3	0	3	4

Prerequisites and co-requisites	
Language of instruction	English
Type	Elective
Level of Course	Bachelor's
Lecturer	
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise (internship)	None
Objectives of the Course	To present the basic concepts and basic decision subjects in production management area, to show the appropriate solution intervals; to explain and examine the basic methods and tools of production/operation management.
Contents of the Course	Production concepts, the relationship between production economics and production management, basic purposes and pursuit of production management, long term and mid-term production planning, the main long term and mid-term decision subjects.

Learning Outcomes of Course

#	Learning Outcomes
1	To identify and to interpret the classical and neo-classical decision subjects and the solution alternatives in production management.
2	Making optimum decisions related to production by the methods such as assignment, work load and linear programming
3	The function of production in the enterprise, production system, comprehend the systems of the production factors
4	Concepts of production

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Production concepts; relationships between production economics and production management; the purposes and main pursuit of production management.	
2	Production factors system; production system; examples of production systems in goods and service production.	
3	Production planning; long, mid- and short term decision problems; strategical design problems.	
4	The design of the production system; a typological look to the production systems; continuous and discontinuous production systems; flexible production systems; lean production system.	
5	Selection of plant location; plant residential layout.	
6	Decisions about setting and operating logistic layout; modern developments in supply and production logistics; MRP, MRP II; JIT, Kanban etc.	
7	Facility capacity, types of capacity and factors affecting capacity; relationships between material requirements planning and capacity planning.	

8	Midterm	
9	Relationships between long, mid- and short term production plans; relationships between aggregate production plan and main production plan and mid-term production program; preparations studies in production and rationalization measures.	
10	Main decision subjects in short term operation planning; bottleneck factor in production/operations management, the reasons and the results of this.	
11	To determine and harmonize the work force's and machine's capacity; operation capacity; material purchasing directions-determination of the net material requirement.	
12	Possible scenarios and used criterions, which are used in determining the optimal production program; Linear programming model and its applications.	
13	Alignment problem and alignment criterion; Queue problem-Line balancing problem.	
14	Work loading (assignment) problem; scheduling and scheduling techniques; CPM-PERT techniques-Gannt Scheme.	
15	Aggregate evaluation of the knowledges, which is getting from the production management course.	
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Lee J. Krajewski, Larry P. Ritzman, Manoj K. Malhorta, Operations management: processes and value chains, 8th ed., New Jersey : Pearson Prentice Hall , 2007.		
2	Roger, G. Schroeder, Operations management : contemporary concepts and cases, 2nd ed., New York : McGraw-Hill/Irwin , 2004.		

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	To identify and to interpret the classical and neo-classical decision subjects and the solution alternatives in production management.		
2	Making optimum decisions related to production by the methods such as assignment, work load and linear programming		
3	The function of production in the enterprise, production system, comprehend the systems of the production factors		
4	Concepts of production		

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	3	42
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	2	28
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0

6	Workshop	0	0	0
7	Preparation for Midterm Exam	0	0	0
8	Midterm Exam	1	5	5
9	Quiz	0	0	0
10	Homework	1	7	7
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	0	0	0
16	Final Exam	1	8	8
				90