

# TOROS ÜNİVERSİTESİ

Faculty Of Engineering  
Industrial Engineering (English)

## Course Information

LEAN MANUFACTURING					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
INE316	Spring	3	0	3	4

<b>Prerequisites and co-requisites</b>	
<b>Language of instruction</b>	English
<b>Type</b>	Elective
<b>Level of Course</b>	Bachelor's
<b>Lecturer</b>	
<b>Mode of Delivery</b>	Face to Face
<b>Suggested Subject</b>	
<b>Professional practise ( internship )</b>	None
<b>Objectives of the Course</b>	To transfer the theoretical and practical knowledge about the manufacturing systems to the students. To explain the main knowledges in the manufacturing systems.
<b>Contents of the Course</b>	Cellular manufacturing, SMED, Push and Pull manufacturing systems, Lean logistics, Lean management systems, Lean manufacturing examples

## Learning Outcomes of Course

#	Learning Outcomes
1	Student learns how to find and wipe out wastage in production
2	Student can look at to value chain with integration.
3	Student gets ability in creation of new strategies for production systems.
4	

## Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Introduction to lean manufacturing	
2	Introduction to lean manufacturing	
3	Lead time concept	
4	Value chain concept	
5	SMED	
6	Lean logistics	
7	Lean management systems	
8	Midterm	
9	Lean cost account	
10	Lean cost account	
11	Lean manufacturing examples	
12	Lean manufacturing examples	

13	Lean manufacturing examples	
14	Lean manufacturing examples	
15	Lean manufacturing examples	
16	Final Exam	

## Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Mann, D. (2010) Creating a Lean Culture, Tools to sustain Lean Conversions, Productivity Press.		
2	Hopp, W. J. And Spearman, M. L. (2000) Factory Physics, Irwin/McGraw-Hill.		
3	Maskell, B. And Baggaley, B. (2004) Practical Lean Accounting, Productivity Press.		
4	Rother, M. (2010) Toyota Kata, McGraw-Hill.		
5	Balack, J. T. (2003) Lean Manufacturing Systems and Cell Design, Society of Manufacturing Engineers		

## 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	Student learns how to find and wipe out wastage in production		
2	Student can look at to value chain with integration.		
3	Student gets ability in creation of new strategies for production systems.		
4			

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	1	5	5
8	Midterm Exam	0	0	0
9	Quiz	0	0	0
10	Homework	1	5	5
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	1	10	10
16	Final Exam	0	0	0
				<b>90</b>