# 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		

Prerequisites and co- requisites	
Language of instruction	English
Туре	Elective
Level of Course	Bachelor's
Lecturer	Asst. Prof. Dr. Ziya Gökalp ALTUN
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise ( internship )	None
Objectives of the Course	To transfer the theoretical and practical knowledge about the manufacturing systems to the students. To explain the main knowledges in the manufacturing systems.
Contents of the Course	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 vastage in production
2	Student can look at to value chain with integratition.
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%	Seminar	Seminar	
2	60%	Term Paper	Term Paper	

# 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 vastage in production		
2	Student can look at to value chain with integratition.		
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
				90