	PRODUCTION		NNING AND CONTROL I					
1	Course Title:	PRODUCTION PLANNING AND CONTROL I						
2	Course Code:	END4071						
3	Type of Course:	Compulsory						
4	Level of Course:	First Cycle						
5	Year of Study:	4						
6	Semester:	7						
7	ECTS Credits Allocated:	5.00						
8	Theoretical (hour/week):	3.00						
9	Practice (hour/week):	0.00						
10	Laboratory (hour/week):	1						
11	Prerequisites:	None						
12	Language:	English						
13	Mode of Delivery:	Face to face						
14	Course Coordinator:	Dr. Ögr. Üyesi MEHMET AKANSEL						
15	Course Lecturers:							
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Endüstri Mühendisliği Bölümü Görükle Kampüsü 16059 Nilüfer BURSA akansel@uludag.edu.tr 294 20 84						
17	Website:	http://www20.uludag.edu.tr/~akansel/END4071.htm						
18	Objective of the Course:	Helping the students gain the knowledge and skills required to plan and control the production activities						
19	Contribution of the Course to Professional Development:	Knowledge and skills to plan the activities required activities for satisfying the customer demands in production and service companies						
20	Learning Outcomes:							
		1	Knowledge on current concept and approaches in supply chain management					
		2	Knowledge on organizational place of planning units and basic principles of planning					
		3	Skills to apply demand forecasting and capacity planning methods					
		4	Skills to apply aggregate planning methods					
		5	Knowledge on basic principles and differences of push and pull type of production control systems					
		6	Knowledge on basic contents of Materials Requirements Planning, Manufacturing Resources Planning and Enterprise Resources Planning approaches					
		7	Knowledge on basic contents of lean manufacturing principles and methods					
		8						
		9						
		10						
21	Course Content:							
		Co	ourse Content:					
Week	k Theoretical Practice							

1	Course introduction (Content, weekly evaluation scheme), introduction to production planning and control (basi concepts)	plan, c									
2	Supply chain management (definition and content) (Supply chain design)	, history	Sa	Sample models of supply chain							
3	Supply chain management (planning coordination in supply chains)	and	Case studies in supply chain management								
4	Demand forecasting (Moving average method, exponential smoothing meth regression analysis)	es od,	Numerical example solution								
5	Demand forecasting (Holt's method, method)	Winter's	Numerical example solution Computer lab practice								
6	Demand forecasting (Croston's mether evaluation of forecasting errors)	od,	Numerical example solution Computer lab practice								
7	Aggregate planning (basic concepts, problem formulation, product mix pro	general blem)	N	umerical example solu	tion						
8	Aggregate planning (Process selection problem, multi-stage production plann problems)	on ning	Numerical example solution Computer lab practice								
9	In-semester summary and recitations		N	umerical example solu	tion						
10	Push vs. pull type of production contr systems (Basic concepts, basic exam Material Requirements Planning (MR	ol nples, P))	N C	Numerical example solution Computer lab practice							
11	MRP II (Manufacturing Resources Planning ERP (Enterprise Resources Planning	anning),)	Software introduction								
Activit	ëes			Number	Duration (hour)	Total Work Load (hour)					
Theore	inahufacturing, kanban system)			14	3.00	42.00					
Practic	als/Labs			14	1.00	14.00					
Self stu	(Chandiactaining (Controlling (Incory of a			14	6.00	84.00					
Homew	vorks			0	0.00	0.00					
Project	Materials:		Т	E., Manufacturing Plai	ning and Control for	of Supply Chain					
Field S	tudies			0	0.00	0.00					
Midtern	n exams		L	gistics Systems Mana	gement, 2nd ed. Jo	Rin Wiley High					
Others				2	1.00	2.00					
Final E	kams		S	trategy, Planning and	Speration, Pearson	3fPed., 2013.					
Total W	Vork Load				.	148.00					
Total w	ork load/ 30 hr		•	Askin, R.G., Goldberg,	J.B., Design and A	na¶/sis of Lean					
ECISO	Credit of the Course			5.00							
23	Assesment										
TERM L	EARNING ACTIVITIES	NUMBE R	WEIGHT								
Midtern	n Exam	1	25.00								
Quiz		2	15.00								
Home \	work-project	0	0.00								
Final E	xam	1	60.00								
Total		4	100.00								
Contrib Succes	oution of Term (Year) Learning Activitie ss Grade	es to	40.00								
Contrib	oution of Final Exam to Success Grade))	60.00								

Total								100	100.00								
Measurement and Evaluation Techniques Used in the Course								ne Qu	Quizzes, midterm exam, final exam								
24 EC	ECTS / WORK LOAD TABLE																
25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16	
ÖK1	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	
ÖK2	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	
ÖK3	5	5	0	5	0	0	0	0	0	0	0	0	5	0	0	0	
ÖK4	5	5	0	5	0	0	0	0	0	0	0	0	5	0	0	0	
ÖK5	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	
ÖK6	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	
ÖK7	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	
			LO: L	earr	ning C	bjec	tive	s P	Q: P	rogra	im Qu	alifica	tions	; ;			
Contrib ution Level:	ontrib 1 very low 2 low ution Level:				3 Medium			4 High			5 Very High						