TOROS ÜNİVERSİTESİ

Faculty Of Engineering
Industrial Engineering (English)

Course Information

OPERATIONS RESEARCH II					
Code	**Semester**	**Theoretical**	**Practice**	**National Credit**	**ECTS Credit**
		Hour / Week			
INE305	Fall	2	2	3	6

Prerequisites and co-requisites	INE200
Language of instruction	English
Type	Required
Level of Course	Bachelor's
Lecturer	Asst. Prof. Melik KOYUNCU
Mode of Delivery	Face to Face
Suggested Subject	NONE
Professional practise (internship)	None
Objectives of the Course	Understanding special forms of linear programming models. Use and modification of simplex algorithm for solving these problems. Applications in real life.
Contents of the Course	Transportation problem and its variants. Network models. Integer programming. Game theory.

Learning Outcomes of Course

#	Learning Outcomes
1	Student shall gain knowledge on optimisation concept
2	Student will be able to model the real life problems
3	Student will be able to model inventory, network and queuing models.
4	

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Review of Linear Programming	
2	Review of Linear Programming	
3	Transportation, assignment and transshipment problems	
4	Transportation, assignment and transshipment problems	
5	Transportation, assignment and transshipment problems	
6	Transportation, assignment and transshipment problems	
7	Midterm	
8	Transportation, assignment and transshipment problems	
9	Network Models	
10	Network Models	
11	Integer Programming	
12	Integer Programming	
13	Game Theory	

14	Game Theory	
15	Game Theory	
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1			

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 shall gain knowledge on optimisation concept	1	
2	Student will be able to model the real life problems	2	
3	Student will be able to model inventory, network and queuing models.	3	
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	4	56
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	3	42
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	12	12
8	Midterm Exam	1	3	3
9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	1	5	5
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	15	15
16	Final Exam	1	3	3
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