Course Syllabus

Code - Course Title	**SAY523 - Advanced Operations Research I**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ MAHMUT ATLAS

Mode of Delivery	The mode of delivery of this course is Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	Linear programming
Recommended Resources	* Taha, H.(1997), Operation Research an Intrıduction,Prectice - Hall Inter. Inc.*Winston, W.L., (1994), Operation Research Application and Algorithms, Duxbury Press
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Operation Researh	
Week - 2		Mathematical Operations Research Models	
Week - 3		The Nature of Linear Programming Models	
Week - 4		Construction of the Models Exams	
Week - 5		The Simplex Method and Sensitivity Analysis	
Week - 6		Duality and Sensitivity Analysis	
Week - 7		Sensitivity Analysis	
Week - 8		Integer Linear Programming	
Week - 9		Integer programming: Branch and Bound Method	
Week - 10		Integer Programming: Gomory' Cutting Plane Method	
Week - 11		Parametric Programming	
Week - 12		Parametric Linear Programming	
Week - 13		Network Models	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 14		Network Models: CPM, PERT	

Learning Outcomes

#	Learning Outcome
1	Describe linear programming problems.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	30
Final Exam	1	50
Practical Work	1	20
	Sum (%)	**100**