Course Syllabus

Code - Course Title	**İŞY502 - Decision Theory**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DOÇ. DR. ŞENAY LEZKİ

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	There is no recommended optional programme component for this course.
Recommended Resources	1. ALADAĞ, Zerrin. Karar Teorisi. Umuttepe Yayınları, Kocaeli, 2011.2. BAĞIRKAN, Şemsettin. Karar Verme. Der Yayınları, İstanbul, 1983.3. ESİN, Alptekin. Yöneylem Araştırmasında Yararlanılan Karar Yöntemleri. Dördüncü Basım. Ankara: Gazi Kitabevi Tic.Ltd.Şti., 2003.4. HALAÇ, Osman. Kantitatif Karar Verme Teknikleri. Arpaz Matbaacılık, İstanbul, 1978.5. TURANLI, Münevver. Pazarlama Yönetiminde Karar Alma. Beta Basım Yayım Dağıtım A.Ş., İstanbul, 19886. TÜTEK, Hülya ve GÜMÜŞOĞLU, Şevkinaz. Sayısal Yöntemler Yönetsel Yaklaşım. İkinci Basım. İstanbul:Beta Basım Yayım Dağıtım A.Ş., 1994.
Work Placement	N/A

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Decision Process and Basic Concepts	
Week - 2		Modeling and Solving of Decision Problems Under Certainty	
Week - 3		Applying the Maximax, Minimax, Hurwicz, Laplace and Regret Criteria to Decision Problems Under Uncertainty	
Week - 4		Applying the Expected Value, Most Likely and Level of Ambition Criteria to Decision Problems Under Risk	
Week - 5		Using Decision Trees in Single-Stage Decision Problems	
Week - 6		Using Decision Trees in Multi-Stage Decision Problem	
Week - 7		Decision Making with Additional Information and Expected Value of Perfect Information	
Week - 8		Introduction to Game Theory	
Week - 9		Two-Person Zero-Sum Games	
Week - 10		Dynamic Programming	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 11		Data Envelopment Analysis	
Week - 12		Analytic Hierarchy Process	
Week - 13		Analytic Network Process	
Week - 14		PROMETHEE Method	

Learning Outcomes

#	Learning Outcome
1	Explain the Basic Concepts about Decision Process.
2	Apply different decision criteria under uncertainty.
3	use different decision criteria under risk.
4	Evaluate the decision problems with Decision Tree Technique.
5	Use game theory in decision making under competitive environment.
6	Have knowledge about sequential and multi-criteria decision making techniques

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.