Course Syllabus

Code - Course Title	**BVA209 - Applied Data Analysis**
Course Type	III. SEMESTER
Laboratory + Practice	2+2
ECTS	**5.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	ÖĞR. GÖR. DR. BÜLENT BATMAZ

Mode of Delivery	Face to face
Prerequisites	Basic Mathematical Knowledge
Courses Recomended	Basic Mathematical Knowledge
Recommended Resources	Faculty Recommendation
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Data Analysis and Basic Concepts and Statistical Foundations: Measures of Central Tendency and Dispersion	
Week - 2		Probability and Probability Distributions	
Week - 3		Data Collection Methods and Dataset Cleaning	
Week - 4		Data Visualization: Charts, Tables, and Graphs	
Week - 5		Descriptive and Summary Statistics	
Week - 6		Inferential Statistics: Confidence Intervals and Hypothesis Testing	
Week - 7		Regression Analysis: Simple and Multiple Regression Models	
Week - 8		Time Series Analysis and Trend Examination	
Week - 9		Fundamentals of Data Mining: Classification and Clustering	
Week - 10		Machine Learning: Supervised and Unsupervised Learning	
Week - 11		Big Data and Data Analysis Applications	
Week - 12		Ethical and Legal Issues: Data Privacy and Security	
Week - 13		Data Analysis Applications: Real-World Datasets with Industrial and Academic Examples	
Week - 14		Assessment and Application of Data Analysis Skills	

Learning Outcomes

#	Learning Outcome
1	Gaining Skills in Data Cleaning and Preprocessing
2	Competence in Data Visualization
3	Competence in Descriptive and Inferential Analysis
4	Competence in Regression and Time Series Analysis

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.