Course Syllabus

Code - Course Title	**VBA201 - Applied Computing for Analytics**
Course Type	III. SEMESTER
Laboratory + Practice	3+1
ECTS	**6.0**
Language of Instruction	İngilizce
Course Type	Required Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ ÖNDER DORAK

Mode of Delivery	Face to face

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		R Fundamentals: Core data structures, vectors, matrices	
Week - 2		Lists and advanced indexing techniques	
Week - 3		Advanced R Programming: Functional programming paradigms	
Week - 4		Utilizing the apply family	
Week - 5		Writing custom functions	
Week - 6		Environment management	
Week - 7		Data Manipulation with Tidyverse: Data importing pipelines	
Week - 8		Cleaning messy datasets	
Week - 9		Merging relational data	
Week - 10		Reshaping with tidyr	
Week - 11		Package development: Building structured R packages	
Week - 12		Writing documentation	
Week - 13		Version control integration	
Week - 14		Ensuring reproducible statistical workflows	

Learning Outcomes

#	Learning Outcome
1	Manipulate core data structures using R
2	Implement advanced functional R programming

Learning Outcomes

#	Learning Outcome
3	Clean and merge datasets utilizing the Tidyverse
4	Build structured and reproducible R packages

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.