Course Syllabus

Code - Course Title	**GEP501 - Advanced Statistics**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	DOÇ. DR. MURAT POLAT

Mode of Delivery	Face to face
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	No prerequisites
Courses Recomended	No components
Recommended Resources	Rex B. Kline (2016). Principles and Practice of Structural Equation Modeling (4th ed.). The Guilford Press.
Work Placement	None
Aims of the Course	Providing training on statistical applications that graduate students in psychology education programs require and will utilize in their research.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Advanced Statistics	
Week - 2		Data Screening and Preliminary Analyses	
Week - 3		Reliability and Scale Analyses	
Week - 4		Exploratory Factor Analysis (EFA)	
Week - 5		Confirmatory Factor Analysis (CFA)	
Week - 6		Multiple Regression Analysis	
Week - 7		Mediation and Moderation Analyses	
Week - 8		Multivariate Analysis of Variance (MANOVA)	
Week - 9		Repeated Measures and Mixed Design Analyses	
Week - 10		Multilevel Modeling	
Week - 11		Introduction to Structural Equation Modeling (SEM)	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 12		Applications of Structural Equation Modeling	
Week - 13		Advanced Structural Equation Modeling	
Week - 14		Student Projects and Course Review	

Learning Outcomes

#	Learning Outcome
1	Applies advanced statistical analyses.
2	Interprets and reports statistical findings.
3	Develops and evaluates structural equation models.
4	Explains the theoretical foundations of multivariate statistical methods.
5	Selects and justifies the appropriate statistical method for a research question.

Sustainable Development Goals

✓ Quality Education

Course Theme

✓ Educational Sciences and Educational Technologies

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	3.00	14	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	5.00	14	70
Ödevler	4.00	4	16
Proje - Rapor - Sunum Hazırlama	4.00	3	12
Ara Sınav Hazırlığı (sınav süresi dahil)	5.00	1	5
Final Sınavı Hazırlığı (sınav süresi dahil)	5.00	1	5
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**6.0**

Assessment Method and Passing Requirements

✓ Project ✓ Homework ✓ Presentation

Assessment Method and Passing Requirements	Quamtity	Percentage (%)

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	40
Final Exam	1	60
	Sum (%)	**100**