Course Syllabus

Code - Course Title	**RPD622 - Structural Equation Modeling**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**7.5**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. MURAT DOĞAN ŞAHİN

Mode of Delivery	Face to face
Prerequisites	Students who will take this course are expected to have a good command of basic statistics. In addition, they are expected to have taken a research methodology/statistics course that includes at least multiple linear regression analysis and to have a good command of regression analysis.
Courses Recomended	SEM is a multivariate statistical method. Therefore, it is useful to take courses that address multivariate issues.
Recommended Resources	Kline, R. B. Principles and Practice of Structural Equation Modeling. Şen, S. Mplus İle Yapısal Eşitlik Modellemesi Uygulamaları
Work Placement	NA

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Fundamentals of Structural Equation Modeling	
Week - 2		Correlation and covariance matrices; expected and observed values	
Week - 3		Fit indexes	
Week - 4		Path analysis: Theory	
Week - 5		Path analysis: Mplus applications	
Week - 6		Measurement model and confirmatory factor analysis	
Week - 7		Midterm	
Week - 8		Structural regression: Theory and Mplus applications	
Week - 9		Multiple group SEM: Theory and Mplus applications	
Week - 10		Mediation Analysis	
Week - 11		Moderation analysis	
Week - 12		Latent Class Analysis	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 13		Latent transition analysis	
Week - 14		Final exam	

Learning Outcomes

#	Learning Outcome
1	Understand and define expected and observed matrices in structural equation modeling
2	Explains and distinguishes the basic concepts in SEM.
3	Explain model data fit and evaluate the fit in real data.
4	Performs path analysis and confirmatory factor analysis in Mplus program.
5	Distinguish between mediating and moderating effects and design an appropriate model.
6	Analyzes the models for mediation and moderation.
7	Explain latent class and transition analyses and test them by constructing an appropriate model.

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.