Course Syllabus

Code - Course Title	**KİM664 - Chemometric Techniques for Quantitative Analysis**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**7.5**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ SAKİNE ATİLA KARACA

Mode of Delivery	The mode of delivery of this course is face to face
Prerequisites	Prerequisites and co-requisites are not required to take the course.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Chemometrics	
Week - 2		Basic Approaches	
Week - 3		Collecting and Creating Some Data; Data sources, Data matrices, Data sets, Training sets	
Week - 4		Collecting and Creating Some Data; Data sources, Data matrices, Data sets, Training sets	
Week - 5		Basics of MS-Excel: Creating functions, Creating graphs	
Week - 6		Basics of MS-Excel: Creating functions, Creating graphs	
Week - 7		Classical Least Squares	
Week - 8		Inverse Least Squares	
Week - 9		Factor Spaces	
Week - 10		Discriminative Analysis	
Week - 11		Principal Component Regression	
Week - 12		Principal Component Regression (PCR)	
Week - 13		Partial Least Squares (PLS)	
Week - 14		The Techniques In Action: Quantitative analysis, Purity analysis	

Learning Outcomes

#	Learning Outcome
1	Explain the basic chemometrics techniques

Learning Outcomes

#	Learning Outcome
2	Evaluate the data collected

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.