Course Syllabus

Code - Course Title	**KİM661 - Liquid Chromatog.-Mass Spec. (LC/MS) and its Applications**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**7.5**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. EROL ŞENER

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 of LC/MS	
Week - 2		From liquid phase to electrical field (Ionization techniques): Electro Spray Ionisation, Electro spray chemical ionisation, Electro spray photo ionisation.	
Week - 3		The choice of ionization techniques	
Week - 4		Mass spectrometry	
Week - 5		Mass analyzers: Quadrapole, Ion trap	
Week - 6		Mass analyzers: Time of flight, Multiple analyzers	
Week - 7		Evaluation of mass spectrum	
Week - 8		Evaluation of LC/MS chromatograms	
Week - 9		LC conditions for LC/MS	
Week - 10		Analytical method development with LC/MS	
Week - 11		Application areas for LC/MS	
Week - 12		The future of LC/MS	

Learning Outcomes

#	Learning Outcome
1	explain working principles of LC/MS system
2	explain strategies of LC/MS method development.
3	evaluate LC/MS analysis data

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.