Course Syllabus

Code - Course Title	**FKG501 - Extraction of Natural Products**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. GÜLMİRA ÖZEK

Mode of Delivery	Face to Face
Prerequisites	There is no prerequisite or co-requisite for this course.
Recommended Resources	- M. Angela, A. Meireles, Extracting Bioactive Compounds for Food Products: Theory and Applications, CRC Press, Taylor & Francis Group, Boca Raton, NL, 2009.
Work Placement	Not applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		- History, define and properties of extraction techniques.	
Week - 2		- Place and the importance of extraction in Pharmacognostic researches	
Week - 3		- Records in Turkish Pharmacopoeia	
Week - 4		- Extraction parameters - Preparation of raw materials	
Week - 5		- Batch and continuous extraction techniques	
Week - 6		- Batch and continuous extraction techniques	
Week - 7		- Extractor types	
Week - 8		- Mechanical extraction - Extraction with hydrocarbons - Turbo extraction	
Week - 9		- Extraction with gases and liquified gases - Extraction with supercritical fluids - Solid phase extraction	
Week - 10		- Microwave extraction - Ultrasound extraction - Extraction by electrical current - Extraction by distillation	
Week - 11		- Some preparates used in pharmacy and obtained by extraction techniques	
Week - 12		- Some preparates used in pharmacy and obtained by extraction techniques	
Week - 13		- Unit operations after the extraction: filtration, evaporation	
Week - 14		- Unit operations after the extraction: drying, crystallization	

Learning Outcomes

#	Learning Outcome
1	categorize the extraction techniques of natural products.
2	interpret the relations between the extraction techniques.
3	wil be able to compare the the records in Turkish Pharmacopoeia.
4	interpret the unit operations after the extraction.

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.