Course Syllabus

Code - Course Title	**FKM524 - Chemistry of Drug Metabolism**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. MEHLİKA DİLEK ALTINTOP

Mode of Delivery	Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Recommended Resources	1) D. Zhang, M. Zhu, W.G. Humphreys, Drug Metabolism in Drug Design and Development, Wiley-Interscience, 2007.2) M.D. Coleman, Human Drug Metabolism An Introduction, 2nd Ed., Wiley, 2010.3) P. Anzenbacher, U.M. Zanger, Metabolism of Drugs and Other Xenobiotics, Wiley-VCH, 2012.4) T.L. Lemke, D.A. Williams, V.F. Roche, S.W. Zito, Foye's Principles of Medicinal Chemistry, 6th Edition, Lippincott Williams &Wilkins;, 2008.5) H. Akgün, A. Balkan, A.A. Bilgin, Ü. Çalış, N. Gökhan, S. Dalkara, H. Erdoğan, D. Demir Erol, M. Ertan, F. Özkanlı, E. Palaska, S. Saraç, C. Şafak, B. Tozkoparan, Farmasötik Kimya, Hacettepe Üniversitesi Yayınları, 2.Baskı, 2004.6) S. Rollas, İlaçların Metabolizması (Biyotransformasyon), Marmara Üniversitesi Eczacılık Fakültesi, 1992.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Drug Metabolism	
Week - 2		Aromatic oxidation, Oxidation of aliphatic carbon atoms	
Week - 3		Oxidation of carbon-nitrogen system and carbon-oxygen system	
Week - 4		Oxidation of carbon-sulfur system	
Week - 5		Oxidation of alcohol and aldehyde, Other oxidative reactions	
Week - 6		Carbonyl reduction, Nitro reduction, Azo reduction	
Week - 7		Other reductions	
Week - 8		Hydrolysis	
Week - 9		Glucuronidation, Sulphation	
Week - 10		Amino acid Conjugation, Glutathione Conjugation	
Week - 11		Acetylation, Methylation	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 12		Drug Metabolism Studies	
Week - 13		Effect of Metabolism on Drug Activity	
Week - 14		Role of Drug Metabolism in Drug Development	

Learning Outcomes

#	Learning Outcome
1	Explains metabolic pathways of drugs.
2	Classifies drug metabolism reactions.
3	Explains the effect of metabolism on drug activity.
4	Explains the role of drug metabolism in new drug development.

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.