Course Syllabus

Code - Course Title	**FTE542 - Biopharmaceutics and Pharmacokinetic**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. MUSTAFA SİNAN KAYNAK

Mode of Delivery	The mode of delivery of this course is face to face.
Prerequisites	There is no pre-requisite or co-requisite for this course.
Courses Recomended	There is no recommended optional programme component for this course.
Recommended Resources	Modern Farmasötik Teknoloji, F. Acartürk, İ. Ağabeyoğlu, N. Çelebi, T. Değim, Z. Değim, T. Doğanay, S. Takka, F. Tırnaksız, 2006.Farmasötik Teknoloji-Teme Konular ve Dozaj Şekilleri, A.Z. Gürsoy, 2004.Applied Biopharmaceutics&Pharmacokinetics;, L.Shargel, S.Wu-Pong, A.B.C. Yu, 2005.Pysical Principles of Pharmacy, A.T. Florence, D. Atwood, 2006. 5. Basic Pharmacokinetic, M.A. Hedaya, 2007.
Work Placement	Not Applicable

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Basic definitions of biopharmaceutics	
Week - 2		Basic information about bioavailability	
Week - 3		Dissolution Rate and Noyes-Whitney model	
Week - 4		Hixson-Crowell cube root law and special cases	
Week - 5		Dissolution Theories, Release Rate and Kinetics	
Week - 6		Factors affecting drug absorption	
Week - 7		Pharmacokinetic parameters and definitions	
Week - 8		Linear and Nonlinear pharmacokinetics	
Week - 9		Pharmacokinetic Modeling, One Compartment Model (Intravenous injection (IV bolus))	
Week - 10		One Compartment Model (Intravenous Infusion)	
Week - 11		One Compartment Model (Absorbable ways)	
Week - 12		Two Compartment Model (Intravenous injection (IV bolus))	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 13		Two Compartment Model (Absorbable Ways)	
Week - 14		Pharmacokinetic exercises	

Learning Outcomes

#	Learning Outcome
1	have knowledge about drug bioavailability and pharmacokintic.
2	understand the importance of the properties of the active ingredient, dosage form and route of administration of drugs.
3	have an idea about drug distribution , the absorption and excretion in the body.

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.