Course Syllabus

Code - Course Title	**FKM529 - Basic Principles of Medicinal Chemistry**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. MEHLİKA DİLEK ALTINTOP

Mode of Delivery	The mode of delivery of this course is face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	Pharmaceutical Chemistry I, Pharmaceutical Chemistry II, Pharmaceutical Chemistry III, Pharmaceutical Chemistry IV
Recommended Resources	Akgün, H., Balkan, A., Bilgin, A.A. ve arkadaşları., Farmasötik Kimya. Ankara: Hacettepe Üniversitesi, ISBN: 975-491-171-1. 2004. Akı-Şener, E., Yalçın, İ., Farmasötik/Medisinal Kimya'da İlaç Etken Madde Tasarım Yöntemleri-1, Kantitatif Yapı-Etki İlişkileri Analizleri (QSAR). Ankara: Ankara Üniversitesi Eczacılık Fakültesi Yayınları No: 86, 2003. Bilgin, A.A., Tozkoparan, B. Örneklerle Organik Kimya Nomenklatürü. Ankara: Hacettepe Üniversitesi Yayınları, ISBN: 978-975-491-266-1. 2008.Block, H.J., Beale, Jr, M.J., Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical Chemistry-Twelfth Edition. ISBN-13: 978-81-8473-396-9, Published by Wolters Kluwer (India) Pvt. Ltd., New Delhi., 2010.Ergenç, N., Gürsoy, A., Ateş, Ö. Farmasötik Kimya Ders Kitabı (Medisinal Kimya) Cilt I. İstanbul: İstanbul Üniversitesi Yayın No: 4094, Eczacılık Fakültesi Yayın No: 72, ISBN 975-404-506-2. 1997. Gringuaz, A., Introduction to Medicinal Chemistry. ISBN: 0-471-18545-0, Wiley-VCH, Inc., USA. 1997.Ishar, M.P.S., Faruk, A., Syntheses of Organic Medicinal Compounds, ISBN 1-84265-280-X Alfa Science International, 7200 The Quorum, Oxford Business Part North Garsington Road, Oxford OX4 2JZ, U.K. p: 206, 2006.Kar, A., Medicinal Chemistry., Anshan Ltd. 6 Newlands Road Tunbridge Wells Kent. TN4 9AT. ISBN: 1 904798 764, ISBN: 978 1904798 767, UK., 2006.Kayaalp, O., Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, Hacettepe-Taş Kitapçılık, 10. Baskı, Ankara., 2002.Mascaretti, O.A., Bacteria versus Antibacterial Agents. ISBN: 1-55581-258-9, ASM Press, Washington, D.C. 2003.Noyanalpan, N., Farmasötik ve Medisinal Kimya Ders Kitabı. Ankara: Ankara Üniversitesi Eczacılık Fakültesi Yayınları No: 49, 1978. Rx MediaPharma® İnteraktif İlaç Bilgi Kaynağı (Sürüm 14.0.0.0), 2014.The Merck Index Thirteenth Edition on CD-ROM, Copyright by Merck&Co;., Whitehouse Station, New Jersey, USA., 2001.Vardanyan, R., Hruby, V., Synthesis of Essential Drugs, ISBN-13: 978-0-44452166-8, ELSEIER B.V., Radarweg 29 P.O. Box 211, 1000 AE, Amsterdam, The Netherlands., p: 499, 2006.
Work Placement	NA

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Biological Reactions Against Drugs	
Week - 2		Absorption and Dispersion of Drug	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 3		The Forms of Dosages	
Week - 4		Transporting from Biologic Membranes of Drugs	
Week - 5		Transportions of Drugs from Special Biological Barriers	
Week - 6		Biological Factors Contributing Biological System-Drug Interactions	
Week - 7		Microsomal Metabolisation of Drugs	
Week - 8		Non-Microsomal Metabolic Transformation of Drugs	
Week - 9		In Vivo Drug Macromolecule Interactions	
Week - 10		Drug Interactions From the View of Metabolisation	
Week - 11		New Drug Development from Drug Metabolites	
Week - 12		Enzyme Inhibition and Antimetabolite Effect	
Week - 13		Relationship Between Drugs’ Physical Properties and Biological Activities	
Week - 14		Relationship Between Drugs’ Chemical Properties and Biological Activities	

Learning Outcomes

#	Learning Outcome
1	interpret the physicochemical factors affecting the absorption and distribution of drug molecule in organism
2	distinguish Phase I chemical reactions playing role in drug metabolism
3	distinguish Phase II chemical reactions playing role in drug metabolism

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

AKTS Workload

Activity	Duration (Hour)	Count	Workload
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.