Course Syllabus

Code - Course Title	**FKM620 - Peptide Syntheses**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**7.5**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. LEYLA YURTTAŞ

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	No laboratory practise

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Physical and chemical properties of aminoacids	
Week - 2		Synthesis methods of aminoacids	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 3		The separation of chiral aminoacids	
Week - 4		The preparation of aminoacid derivatives	
Week - 5		The attachment of protecting groups to aminoacids	
Week - 6		The attachment of protecting groups to amino group, carboxyl group and brached groups	
Week - 7		Structures used as protecting group	
Week - 8		The properties of amid structure	
Week - 9		Synthesis of amid bonds	
Week - 10		The activation of free functions	
Week - 11		Procedure of acid Chloride and azide	
Week - 12		Symmetrical and complex anhydrides,	
Week - 13		The properties of peptides	
Week - 14		The use of protecting groups’ aminoacids in peptide syntheses	

Learning Outcomes

#	Learning Outcome
1	The researcher/student will be able to distinguish suitable amino acids for the synthesis of target peptide
2	The researcher/student will be able to distinguish suitable protecting groups for the synthesis of target peptide
3	The researcher/student will be able to propose the required medium and method for the cleavage of protecting groups

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload

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.