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Syllabus

Code and Name of the Course	PHM2008 - Introduction to Pharmaceutical Chemistry
Course Coordinator	Prof. Dr. Esin AKI YALÇIN
Course Grade	Undergraduate
Course Credit	2
Course Type	Compulsory
Course Content	In this course which is an introduction to Pharmaceutical Chemistry courses, the scope and purpose of Pharmaceutical Chemistry, drug discovery and development, pharmacokinetic properties of drugs such as absorption, solubility, pK, ionization, concepts of isosterism, bioisosterism, target, ligand and receptor, transport systems, chemical bonds, drug- target interactions, stereochemistry-biological activity relationship, computer-aided drug design, quantitative structure-activity relationships, molecular modeling methods, metabolism and prodrug topics are discussed. Also, nomenclature rules are given briefly. Antihistamine compounds and non-steroidal anti-inflammatory drugs, which are effective on the immune system, are given in this course.
Aim of the Course	This course aims to teach drug groups by associating drug chemistry with the design, development, chemical structure and biological activity relationships, metabolism and pharmacokinetic properties of drugs.
Course Duration	One term (two hours/week)
Language of Instruction	English
Prerequisite	-
Recommended Sources	<ul style="list-style-type: none"> - Burger's Medicinal Chemistry, Drug Discovery and Development 7th Edition, 8 Volume Set ISBN: 978-0-470-27815-4 September 2010. - Foye's Principles of Medicinal Chemistry, ISBN-10: 1496385020 ISBN-13: 978-1496385024, Edition: 8, LWW, Publication Date: August 29, 2019. - Kantitatif Yapı-Etki İlişkileri Analizleri (QSAR), E. Akı-Şener and İ. Yalçın, Ankara Üniversitesi Basımevi, 2003. - Pharmaceutical Chemistry, David G. Watson (Author), ISBN-10: 0443072329 ISBN-13: 978-0443072321, Edition: 1, Elsevier, Publication Date: February 18, 2011. - The Organic Chemistry of Drug Design and Drug Action, R.B. Silverman and M.W. Holladay (Author), ISBN: 978-0-12-382030-3, Edition: 3, Academic Press, 2014. - Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical Chemistry, ISBN-10: 0781779294 ISBN-13: 978-0781779296 Edition: Twelfth, North American Edition, Publication Date: March 2, 2010. - Farmasötik Kimya Ders Kitabı Cilt 1 (Medisinal Kimya), N. Ergenç, A. Gürsoy, Ö. Ateş, ISBN: 975-404-506-2, İstanbul Üniversitesi Basımevi, 1997. - Farmasötik ve Medisinal Kimya, Hacettepe Üniversitesi Yayınları, ISBN: 9789754914894, 2019.
Course Credit (ECTS)	3
Practise	-
Other-1	-