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Syllabus

(Code and Name of the Course (Dersin Kodu ve İsmi))	PHA715 GENOMICS AND KEMOINFORMATICS IN MEDICINAL CHEMISTRY
Lecturer Sorumlusu (Dersin Sorumlusu)	Prof. Dr. Mehmet Erdem Büyükbingöl
Course Grade (Dersin Düzeyi)	Undergraduate
Course Type (Dersin Türü)	Selective
Course Content (Dersin İçeriği)	<p>The content of the course is primarily designed as a medicinal chemistry perspective, when a drug molecule is given to a living organism, at a level that can direct the perception of genetic structure and related molecules. For this, the role of first-line gene-controlling molecular structures in drug efficacy has been addressed in the context of general rules. According to this; Changes in the protein conformation that result from the DNA molecular structure and differentiate into different mutations of the genome change the power of drug molecules to show their activity by binding to these proteins. Thus, drug-protein interactions are important both in terms of medicinal chemistry and chemoinformatics, so that the interaction pattern of two organic structures, such as drugs and proteins, can be scientifically explained to the extent that a patient can be treated. The genomics and the resulting realities of proteomics are discussed in the context of this lesson with simple details.</p>
Aim of the Course (Dersin Amacı)	<p>In this course, the principle aim of a pharmacy student is to organize the approach of "no sickness, but patient" approach in terms of medicinal and chemoinformatic methods which facilitate the perception of a pharmacist's activity on a patient by the relevance of the structure of a drug molecule.</p>
Course Duration (Dersin Süresi)	1 hour/week
Language of Instruction (Eğitim Dili)	ENGLISH
Prerequisite (Ön Koşul)	None
Recommended Sources (Önerilen Kaynaklar)	<p>1. Tingting Cheng, Xianquan Zhan Pattern recognition for predictive, preventive, and personalized medicine in cancer, EPMA Journal, 8, 51-60 (2017). Rocco Savino, Sergio Paduano, Mariaimmacolata Preianò and Rosa Terracciano, The Proteomics Big Challenge for Biomarkers and New Drug-Targets Discovery, Int. J. Mol. Sci, 13, 13926-13948 (2012).</p>
Dersin KreCourse Credit (Dersin Kredisi)	1
Practise (Laboratuvar)	None
Other-1 (Diğer-1)	None