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Syllabus**

(Code and Name of the Course (Dersin Kodu ve İsmi))	PHA284 – Organic Chemistry-II
Lecturer (Dersin Sorumlusu)	Prof. Dr. Mehmet Erdem BÜYÜKBİNGÖL Prof. Dr. Sibel SÜZEN
Course Grade (Dersin Düzeyi)	Undergraduate (Lisans)
Course Type (Dersin Türü)	Compulsory course (Zorunlu)
Course Content (Dersin İçeriği)	<p>In the second term to organic chemistry, we have aimed the advance topics which deals with the application of structure and theory to the study of organic reaction mechanisms. The previous term was more likely the introductory features of the organic chemistry more likely related to preparation of students for the "Drug World" as well as understanding of biochemical mechanisms within the living organisms.</p> <p>On the basis of first term, stereochemical features including conformation and stereoelectronic effects; organic reaction mechanisms related to drug synthesis, explanations of certain name reactions of functional groups, will be the main aspects of this term.</p>
Aim of the Course (Dersin Amacı)	<p>The aim of the organic chemistry-II course is continuation to prepare students to "DRUG WORLD", on the basis of first term. The control of reactivity and mechanisms to achieve specific design and syntheses of organic products is one of our aims in course.</p> <p>To do this, students will be led to develop an understanding and appreciation of both structure and chemical transformations of organic molecules. Students will also be acquired basic concepts of electronic structure and be able to apply them to solve problems from various areas of organic chemistry, including stereochemistry, reactivity patterns and basic synthesis.</p>
Learning Outcomes (Dersin Öğrenme Çıktıları)	<p>On completion of this course students should be able to;</p> <ul style="list-style-type: none"> - How to use their understanding of organic mechanisms to predict the outcome of reactions - The prediction of mechanisms for organic reactions - The reactivity and stability of an organic molecule based on structure, including conformation and stereochemistry - How to design syntheses of organic molecules - Understanding of carbohydrates, proteins and lipids <p>Improvements in learning strategies, preparation homeworks, verbal presentations, critical-thinking, and problem-solving skills (drived by daily questions) are the expected outcomes for this course.</p>
Course Duration (Dersin Süresi)	One Term (three hours/week)
Language of Instruction (Eğitim Dili)	English
Prerequisite (Ön Koşul)	None
Recommended Sources (Önerilen Kaynaklar)	<p>Sources for the course;</p> <ul style="list-style-type: none"> - Organic Chemistry Paula Y. Bruice Hardcover, 1440 Pages 6th Edition, 2010

	<p>ISBN: 978-0-321-66313-9 Prentice Hall - Organic Chemistry Jonathan Clayden, Nick Greeves, Stuart Warren Paperback, 1234 Pages 2nd Edition, 2012 ISBN: 978-0199270293 Oxford University Press - Chirality in Drug Research Eric Francotte, Wolfgang Lindner Hardcover, 351 Pages First Edition, 2006 ISBN: 3-527-31076-2 Wiley-VCH</p>
Course Credit (Dersin Kredisi)	2
Practise (Laboratuvar)	None
Other-1 (Diğer-1)	None