

Enquiry for Course Details

CHEM2442 Fundamentals of organic chemistry (6 credits)		Academic Year	2023
Offering Department	Chemistry	Quota	100
Course Co-ordinator	Dr P H Toy, Chemistry < phtoy@hku.hk >		
Teachers Involved	(Dr P H Toy, Chemistry)		
Course Objectives	The major objective of this course is to give the students a basic understanding of organic chemistry, especially in the context of daily life. This will be achieved through the introduction of the chemistry of organic functional groups that form the basis of organic molecules. The concepts presented in the lectures will be reinforced by a series of laboratory experiments.		
Course Contents & Topics	The chemistry of organic functional groups such as alkenes, alkynes, alkyl halides, alcohols, aldehydes, ketones, carboxylic acids and their derivatives, and amines will be discussed, as will the general concepts of molecular structure, conformation and stereochemistry.		
Course Learning Outcomes	On successful completion of this course, students should be able to:		
	CLO 1	demonstrate basic understanding of the structure of organic molecules	
	CLO 2	demonstrate basic understanding of the reactivity of organic molecules	
	CLO 3	appreciate how organic chemistry plays an important role in everyday life	
Pre-requisites (and Co-requisites and Impermissible combinations)	Pass in CHEM1042; and Not for students who have passed CHEM2441, or have already enrolled in this course.		
Course Status with Related Major/Minor /Professional Core	2023 Major in Food & Nutritional Science (Disciplinary Elective) 2023 Minor in Chemistry (Disciplinary Elective) 2022 Major in Food & Nutritional Science (Disciplinary Elective) 2022 Minor in Chemistry (Disciplinary Elective) 2021 Major in Food & Nutritional Science (Disciplinary Elective) 2021 Minor in Chemistry (Disciplinary Elective) 2020 Major in Food & Nutritional Science (Disciplinary Elective) 2020 Minor in Chemistry (Disciplinary Elective) 2019 Major in Food & Nutritional Science (Disciplinary Elective) 2019 Minor in Chemistry (Disciplinary Elective)		
Course to PLO Mapping	2023 Major in Food & Nutritional Science < PLO 1,2,3 > 2022 Major in Food & Nutritional Science < PLO 1,2,3 > 2021 Major in Food & Nutritional Science < PLO 1,2,3 > 2020 Major in Food & Nutritional Science < PLO 1,2,3 > 2019 Major in Food & Nutritional Science < PLO 1,2,3 >		
Offer in 2023 - 2024	Y	1st sem	Examination Dec
Offer in 2024 - 2025	Y		
Course Grade	A+ to F		
Grade Descriptors	A	Demonstrate thorough mastery at an advanced level of extensive organic chemistry knowledge, and skills required for attaining all the course learning outcomes. Show strong analytical and critical abilities and logical thinking, with evidence of original thought, and ability to apply knowledge to a wide range of complex, familiar and unfamiliar problems.	
	B	Demonstrate substantial command of organic chemistry with a broad range of knowledge, and skills required for attaining at least most of the course learning outcomes. Show evidence of analytical and critical abilities and logical thinking, and ability to apply knowledge to familiar and some unfamiliar problems.	
	C	Demonstrate general but incomplete command of organic chemistry knowledge, and skills required for attaining most of the course learning outcomes. Show evidence of some analytical and critical abilities and logical thinking, and ability to apply knowledge to most familiar problems.	
	D	Demonstrate partial but limited command of organic chemistry knowledge, and skills required for attaining some of the course learning outcomes. Show evidence of some coherent and logical thinking, but with limited analytical and critical abilities. Show limited ability to apply knowledge to solve problems.	
	Fail	Demonstrate little or no evidence of command of organic chemistry knowledge, and skills required for attaining the course learning outcomes. Lack of analytical and critical abilities, logical and coherent thinking. Show very little or no ability to apply knowledge to solve problems.	
Course Type	Lecture with laboratory component course		
Course Teaching & Learning Activities	Activities	Details	No. of Hours
	Laboratory		20
	Lectures		24
	Tutorials		5
	Reading / Self study		100
Assessment Methods and Weighting	Methods	Details	Weighting in final course grade (%) Assessment Methods to CLO Mapping
	Examination		50 CLO 1,2,3
	Test	(test/quiz)	50 CLO 1,2,3

Required/recommended reading and online materials	Bruice, P.Y.; Essential Organic Chemistry (Pearson, 2016, 3rd edition)
Course Website	NIL
Additional Course Information	Students who are planning to take CHEM3441 should take CHEM2441. Laboratory classes are mandatory. Students must complete ALL experiments and take a written laboratory test in order to pass this course.