The Chinese University of Hong Kong Faculty of Science Science Academy for Young Talent

Spring Courses 2022 Course Outline

CUSA1041 Essentials of Organic Chemistry 有機化學精華

Introduction:

This course aims at introducing the essential concepts of organic chemistry and how it is closely related to our daily life. Students will learn the fundamental knowledge of organic chemistry with a particular emphasis on stereochemistry. Through lectures and video demonstration of important principles and interesting experiments, students will be introduced to lab techniques/instrumentation and scientific methods in organic chemistry. Students can therefore gain appreciation of the daily practice of a synthetic organic chemist in a university setting.

本課程旨在介紹有機化學的精華和這一學科與我們日常生活的緊密聯繫。學生將學習有機化學的基本知識及立體化學的專題討論。通過講座及視頻演示的方式對重要的化學原理以及實驗操作進行展示,學生將學到有機化學的實驗技術、儀器和科學方法,從而接觸到有機合成化學家在大學裏的日常工作。

Medium of Instruction: Cantonese supplemented with English

Organising Unit: Department of Chemistry, Faculty of Science, CUHK

Teachers: Prof. Gavin Chit TSUI

Department of Chemistry, CUHK

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Course content:

6 April 2022 (Wednesday)	9:30 am – 12:30 pm	Topic 1: Introduction to Organic Chemistry (lecture)
	2:00 pm – 5:00 pm	Topic 2: Separation of Mixtures by Column Chromatography (lab demonstration)
7 April 2022 (Thursday)	9:30 am – 12:30 pm	Topic 3: Alkanes and Stereochemistry (lecture)
	2:00 pm – 5:00 pm	Topic 4: Resolution of <i>trans</i> -1,2-diaminocyclohexane (lab demonstration)
8 August 2022 (Friday)	9:30 am – 12:30 pm	Topic 5: Chemistry of Life and Basic Organic Reactions (lecture)
	2:00 pm – 5:00 pm	Topic 6: Amazing Molecules that Changed the World (special lecture)
9 April 2022* (Saturday)	Make-up class	

Duration	3 days sessions (total 18 contact hours)	
Data	6-8 April 2022	
Date	9 April 2022* (make-up class)	
Time	9:30 am – 12:30 pm & 2:00 pm – 5:00 pm	
Teaching Mode#	Online (Zoom)	
Enrollment	30	
Expected applicants	Students who are promoting to or studying S4-S6	
Tuition Fee	HKD 3,180.00	
	1.25 Academy Unit	
Credit	Certificates or letters of completion will be awarded to students who attain at least 75%	
	attendance and pass the assessment (if applicable).	

^{*} This date is reserved for make-up classes in case there is any cancellation of classes due to unexpected circumstances.

[#] This course is offered online lessons via zoom platform.