

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

Summer Courses 2022
Course Outline

CUSA1013 Great Discoveries in Biomedical Sciences
生物醫學大發現

Introduction:

This course is the foundation course of CUSA2013 Great Discoveries of Biochemical Sciences (Senior Class), aiming at providing a holistic review of the development of life sciences. The course shall provide Secondary 1 to 3 students with some general understanding of prehistoric life forms, such as prokaryotic cells to more complex organisms ever existed on Earth, followed by the evolution of human beings. Finally, some milestones of the industrial revolution associated to the highlights of modern biomedical sciences shall be covered. Throughout the study of a series of fundamental topics, students are expected to gain some foundation knowledge of life and its evolution; interested students are encouraged to join the senior class to pursue some more in-depth knowledge related to biomedical sciences.

本課程為 CUSA2013 生化科學大發現(高級班)的基礎課程，旨在讓初中生回顧生命科學的發展。課程內容包括一些史前生物的知識，例如原核細胞和其他在地球曾出現過的生物；從而再為同學介紹人類的演化。最後，本課程更將涵蓋工業革命以來的一些重要里程碑以及現代生物醫學的一些前瞻。通過對一系列特定課題的介紹，同學們將對生命及其演化有更多的理解；此有助鼓勵感興趣的學生再報讀高級班，進而追求生物醫學更深入的科學知識。

Medium of Instruction: Cantonese supplemented with English

Organising Unit:

Biochemistry Programme, School of Life Sciences, Faculty of Science, CUHK

Teacher:

Dr. LO Fai Hang

School of Life Sciences, CUHK

Rm. G83, Science Centre, CUHK

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Demonstrators:

Students from Programme of Biochemistry, School of Life Sciences, CUHK

Course Content:

27 August 2022 (Saturday) 9:30 am - 1:00 pm	<u>Lecture:</u> <ul style="list-style-type: none">• Introduction to basic biomolecules, such as genetic materials and enzymes• Evolution of life from prokaryotic cells to multicellular organisms• The stories of Homo sapiens• Industrial revolution and the development of life sciences Next gen biomedical sciences <u>Other in-class activities</u>
3 September 2022* (Saturday) 9:30 am - 1:00 pm	Make-up class

Duration	1 whole day sessions (total 3.5 contact hours)
Date	27 August 2022 3 September 2022* (make-up class)
Time	9:30 am - 1:00 pm
Venue[#]	Face to Face (The Chinese University of Hong Kong)
Enrollment	20 – 25
Expected applicants	S1-S3 Students who are interested in biomedical sciences
Tuition Fee	HKD 800.00 (including materials for activities)
Credit	0.25 Academy Unit Certificate or letter 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 will be offered on CUHK campus in face-to-face mode only. It may be cancelled in accordance with the pandemic development and the policy of the university.