

Enquiry for Course Details

CHEM4911 Capstone experience for chemistry undergraduates: HKUtopia (6 credits)		Academic Year	2020
Offering Department	Chemistry	Quota	---
Course Co-ordinator	Dr A P L Tong, Chemistry < apltong@hku.hk >		
Teachers Involved	(Various teachers in the Department, Chemistry)		
Course Objectives	This project-based course with the theme of Chemistry for a Better Living in a Foreseeable Future aims to provide students with a capstone experience. It aims to enable students to think what are the key issues the world is facing with that have to be solved by chemistry and related technology. Students will need to apply what they have learnt in classroom and conduct literature search regarding advanced chemistry research and related technology under development to solve the problems identified in their project using various channels.		
Course Contents & Topics	No formal teaching. It is expected that students are actively engaged and should devote 120-140 hours to working on this project. Students will work in groups of two or three, under the supervision of the course coordinator. The duration of the project will be two to three months. The time of running this project-based course is in the summer (May - August).		
Course Learning Outcomes	On successful completion of this course, students should be able to:		
	CLO 1	observe and evaluate the various issues we are facing with and determine ways in which chemistry can be used to solve the problems	
	CLO 2	integrate theory and practice, and to understand limitations of their current knowledge	
	CLO 3	work in a team and to collaborate with people with different background	
	CLO 4	express scientific ideas effectively in both written and oral forms	
	CLO 5	develop further logical, critical thinking and creativity	
	CLO 6	advocate to others the appreciation for chemistry as to its relevance to our daily life	
Pre-requisites (and Co-requisites and Impermissible combinations)	Students are expected to have satisfactorily completed all introductory chemistry disciplinary core courses and at least 24 credits of advanced level disciplinary core/elective chemistry courses in the Chemistry Major. Students who are interested in taking the course should contact the course coordinator for application in April - May. Late application may not be considered. This capstone course is for Chemistry Major students only. The earliest that a student is allowed to take this capstone course is their year 3 study.		
Course Status with Related Major/Minor /Professional Core	2020 Major in Chemistry (Disciplinary Elective) 2020 Minor in Chemistry (Disciplinary Elective) 2019 Major in Chemistry (Disciplinary Elective) 2019 Minor in Chemistry (Disciplinary Elective) 2018 Major in Chemistry (Disciplinary Elective) 2018 Minor in Chemistry (Disciplinary Elective) 2017 Major in Chemistry (Disciplinary Elective) 2017 Minor in Chemistry (Disciplinary Elective) 2016 Major in Chemistry (Disciplinary Elective) 2016 Minor in Chemistry (Disciplinary Elective)		
Course to PLO Mapping	2020 Major in Chemistry < PLO 1,2,3,4,5 > 2019 Major in Chemistry < PLO 1,2,3,4,5 > 2018 Major in Chemistry < PLO 1,2,3,4,5 > 2017 Major in Chemistry < PLO 1,2,3,4,5 > 2016 Major in Chemistry < PLO 1,2,3,4,5 >		
Offer in 2020 - 2021	Y	Summer	Examination No Exam
Offer in 2021 - 2022	Y		
Course Grade	A+ to F		

Grade Descriptors	<table border="1"> <tr> <td data-bbox="617 155 706 296">A</td> <td data-bbox="706 155 1448 296">Demonstrate thorough grasp of the subject. Show strong analytical and critical abilities and logical thinking, with evidence of original thought. Insightful use and critical analysis / evaluation of information drawn from a full range of high quality sources and to quote/reference aptly. Critical use of data and results to draw appropriate and insightful conclusions. Show integration of the full range of appropriate theories, principles, evidence and techniques. Apply highly effective organizational and presentational skills. [Work of A+ should show considerable additional work beyond that is required in wider areas relevant to the topic.]</td> </tr> <tr> <td data-bbox="617 296 706 401">B</td> <td data-bbox="706 296 1448 401">Demonstrate substantial grasp of the subject. Evidence of analytical and critical abilities and logical thinking. 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Required/recommended reading and online materials	No specific list of textbooks and references. Students are encouraged to obtain information via various channels (main library, e-journals, internet, and discussions with classmates and teachers, etc.).												
Course Website													
Additional Course Information	Enrolment of this course is not conducted via the online course selection system and should be made through the relevant Department/School office after approval has been obtained from the course coordinator.												

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