City University of Hong Kong
Course Syllabus

offered by Department of Chemistry
with effect from Semester A 2024/25

Part I Course Overview

Course Title:	Window on Science B
Course Code:	CHEM8007B
Course Duration:	4 semesters (Sem A & B)
Credit Units:	3 credits
Level:	R8
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	Nil
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	BCH8007B Window on Science B
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract

This course is a core postgraduate course for M.Phil. students of the Department of Chemistry.

In this course, postgraduate M.Phil. students will:

- Discover and learn about frontier scientific research methodologies and achievements in Chemistry, Biology, Environmental Science and various other disciplines in science from leading experts in their fields
- Develop skills in communication and presentation of scientific results in a professional manner
- Develop ability to critically appraise research results
- Broaden their knowledge base in scientific research topics other than their own disciplines, and to develop critical thinking and analytical skills in research

2. Course Intended Learning Outcomes (CILOs)

No.	CILOs[#]	Weighting (if applicable)	Discovery-enriched curriculum related learning outcomes		
			A1	*A2*	*A3*
1.	Articulate and critically evaluate advanced research methodologies in Biology, Chemistry, Environmental Science and various other disciplines of science based on available literatures and experience acquired by leading experts in their fields	40%	√	√	
2.	Demonstrate detailed knowledge of the relevant background literature with good understanding of the scientific research methods involved; analysis and interpret experimental data; draw scientifically sound conclusions from experimental results	20%	√	√	
3.	Demonstrate good presentation skills and ability to communicate scientific information in a professional manner	10%		√	√
4.	Critically evaluate experimental data and results	30%		√	√
		100%			

A1: *Attitude*
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: *Ability*
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: *Accomplishments*
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

3. Learning and Teaching Activities (LTAs)

LTA	Brief Description	CILO No.				Hours/week (if applicable)
		1	2	3	4	
Departmental seminars and seminar reports	(1) Students will participate in departmental seminars given by invited speakers (2) Students will prepare seminar reports on selected seminars to provide critical analyses and reviews on the research topics and the methodologies adopted	✓				(1) Students will attend at least twelve departmental seminars within a period of four semesters (at least three seminars per semester) (2) Students will prepare two seminar reports within a period of four semesters
Oral presentations	Students will deliver formal oral presentations of their own research work (50 min.) followed by questions (10 min.) from the audience		✓			(1) Students will attend at least twelve oral presentations given by fellow postgraduate students of the relevant discipline within a period of four semesters (at least three seminars per semester) (2) Students will deliver two oral presentations within a period of four semesters
As in CILO 2	As in CILO 2			✓		As in CILO 2
Critiques	Students will prepare critiques to critically analyse and review the content, research methodology, interpretation of experimental data and presentation skill of selected presentations of other fellow postgraduate students				✓	Students will prepare four critiques within a period of four semesters

4. Assessment Tasks/Activities (ATs)

Assessment Tasks/Activities	CILO No.				Weighting	Remarks
	1	2	3	4		
Continuous Assessment: 100%						
Attendance of seminars and assessment of seminar reports by the corresponding invited speakers or relevant assessors	✓				40%	
Assessment of student's oral presentation by his/her research supervisor and a second assessor		✓			20%	See the note below
As in CILO 2			✓		10%	
Assessment of the critiques by the supervisors of the postgraduate students to whom the critiques were concerned				✓	30%	
Examination: 0% (duration: --)						
					100%	

Note: Assessment from the research supervisor and the second assessor each constitutes 50% of the overall presentation marks (CILO 2 & 3)

Starting from Semester A, 2015-16, students must satisfy the following minimum passing requirement for courses offered by CHEM:
"A minimum of 40% in both coursework and examination components."

5. Assessment Rubrics

Applicable to students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Attendance of seminars and assessment of seminar reports by the corresponding invited speakers or relevant assessors	General criterion are students' understanding of the topic, research methodologies involved and material presented and their critical analysis of the science in the presentation.	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Assessment of student's oral presentation by his/her research supervisor and a second assessor	General criterion are the content, method and organization of the presentation, the students' communication skill and their handling of the questions.	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Assessment of the critiques by the supervisors of the postgraduate students to whom the critiques were concerned	General criterion are students' understanding of the topic and materials presented, their critical analysis of the science in the presentation and their critical evaluation of the presentation skills.	High	Significant	Moderate	Basic	Not even reaching marginal levels

Applicable to students admitted from Semester A 2022/23 to Summer Term 2024

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
1. Attendance of seminars and assessment of seminar reports by the corresponding invited speakers or relevant assessors	General criterion are students' understanding of the topic, research methodologies involved and material presented and their critical analysis of the science in the presentation.	High	Significant	Basic	Not even reaching marginal levels
2. Assessment of student's oral presentation by his/her research supervisor and a second assessor	General criterion are the content, method and organization of the presentation, the students' communication skill and their handling of the questions.	High	Significant	Basic	Not even reaching marginal levels
3. Assessment of the critiques by the supervisors of the postgraduate students to whom the critiques were concerned	General criterion are students' understanding of the topic and materials presented, their critical analysis of the science in the presentation and their critical evaluation of the presentation skills.	High	Significant	Basic	Not even reaching marginal levels

Part III Other Information

1. Keyword Syllabus

There will be no fixed syllabus for this course. Seminars and presentation topics will be based on the research disciplines of the postgraduate M.Phil. student.

2. Reading List

2.1 Compulsory Readings

1.	
2.	
3.	
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2.2 Additional Readings

1.	
2.	
3.	
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