

Course Syllabus

offered by Department of Chemistry
with effect from Semester B 2017/18

This form is for the completion by the *Course Leader*. The information provided on this form is the official record of the course. It will be used for the City University's database, various City University publications (including websites) and documentation for students and others as required.

Please refer to the Explanatory Notes on the various items of information required.

Prepared / Last Updated by:

Name: Prof. H. L. Kwong Academic Unit: Department of Chemistry
3442 7304 /
Phone/email: bhhoik@cityu.edu.hk Date: 30 November 2017

**City University of Hong Kong
Course Syllabus**

**offered by Department of Chemistry
with effect from Semester B 2017/18**

Part I Course Overview

Course Title:	Directed Studies for Postgraduate Students
Course Code:	BCH8004A, BCH8004B, BCH8004C, BCH8004D
Course Duration:	Flexible, varying from a few weeks to one semester
Credit Units:	Flexible, in the range 1-4
Level:	R8
Proposed Area: <i>(for GE courses only)</i>	<input type="checkbox"/> Arts and Humanities <input type="checkbox"/> Study of Societies, Social and Business Organisations <input type="checkbox"/> Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: <i>(Course Code and Title)</i>	Nil
Precursors: <i>(Course Code and Title)</i>	Nil
Equivalent Courses: <i>(Course Code and Title)</i>	Nil
Exclusive Courses: <i>(Course Code and Title)</i>	Nil

Part II Course Details

1. Abstract

(A 150-word description about the course)

This course aims to allow postgraduate students to pursue a defined programme of study directed by an academic staff member in CHEM and/or to attend courses/workshops/study tour in relevant areas recommended by the Department. The course encourages postgraduate students to broaden their vision in scientific research via discovery-based learning and research, to develop their initiative, interests, individual thinking, and have a deeper understanding on a specific area in Biology/Chemistry/Environmental Sciences.

Postgraduate students can obtain up to 4 credit units from the BCH8004 Directed Studies for Postgraduate courses. These 4 credit units can be obtained from one directed study activity or spread into a number of smaller directed study activities (the maximum number of directed study activity that can be taken is 4). The nature of the directed study activity, number of credit units gained, and evaluation/assessment pattern will be considered by the Head of CHEM, in consultation with the BCH8004 Directed Studies Committee, before initiating the Directed Studies. Discovery-based study activities will be highly encouraged.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs [#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Conduct specified work under the direction of a faculty member in CHEM or attend courses/workshops/study tours [†] in relevant areas recommended by the Department	See the note below regarding restrictions on topics and/or areas of study		√	√
		100%			

* If weighting is assigned to CILOs, they should add up to 100%.

†NOTE: The courses/workshops/study tours taken as Directed Studies should not be solely offered by the research degree supervisor of the postgraduate student. The postgraduate student has to obtain formal approval from the Head of CHEM, in consultation with the BCH8004 Directed Studies Committee, before initiating his/her directed study.

Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

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. Teaching and Learning Activities (TLAs)
(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.	Hours/week (if applicable)
		1	
Course/ Workshop/ Study Tour	Although specific teaching and learning activities can be stated, discovery-based mode of study is emphasized. The course is flexible, and has no specific syllabus. The postgraduate student can attend a particular workshop or a training course; participate in a study tour, etc., in Biology, Chemistry or Environmental Sciences.	✓	Flexible, depending upon total credit units assigned.

4. Assessment Tasks/Activities (ATs)
(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.	Weighting*	Remarks
	1		
Continuous Assessment: <u>100%</u>			
Varies dependent upon the nature of the directed study activities. Evaluation/assessment could be a combination of continuous assessment, critical review on the subject, seminar presentation and examination [‡] .	✓	See the note below as well as the note in (3) above	
Examination: <u>0%</u> (duration: --)			
<i>* The weightings should add up to 100%.</i>		100%	

‡NOTE: Examination should be offered by the workshop / training course of which the postgraduate student has taken for his/her Directed Studies. Examination should not be given by CHEM or any faculty member of CHEM.

Starting from Semester A, 2015-16, students must satisfy the following minimum passing requirement for BCH courses:

“A minimum of 40% in both coursework and examination components.”

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Varies dependent upon the nature of the directed study activities. Evaluation/assessment could be a combination of continuous assessment, critical review on the subject, seminar presentation and examination.	Varies dependent upon the nature of the studies. General criterion are students' ability to integrate concepts of chemistry/biology/environmental science, and to apply them to solve problems and/or demonstrate scientific advancement in the subject of the studies	High	Significant	Moderate	Basic	Not even reaching marginal levels

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(An indication of the key topics of the course.)

The course is flexible, and has no specific syllabus. A postgraduate student can opt to attend a particular workshop or training course, participate in a study tour, etc. in Biology, Chemistry or Environmental Sciences. Discovery-based study activities will be highly encouraged.

Postgraduate students can obtain up to 4 credit units from the BCH8004 Directed Studies for Postgraduate Students. These 4 credit units can be obtained from one directed study activity or spread into a number of smaller directed study activities (the maximum number of directed study activity that can be taken is 4). The nature of the directed study activity, number of credit units gained, and evaluation/assessment pattern will be considered by the Head of CHEM, in consultation with the BCH8004 Directed Studies Committee, before initiating the Directed Studies.

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	Depend on the nature of the directed study activities.
2.	
3.	
...	

2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	Depend on the nature of the directed study activities.
2.	Online Resources: Depend on the nature of the directed study activities.
3.	
...	

A. Please specify the Gateway Education Programme Intended Learning Outcomes (PILOs) that the course is aligned to and relate them to the CILOs stated in Part II, Section 2 of this form:

GE PILO	Please indicate which CILO(s) is/are related to this PILO, if any (can be more than one CILOs in each PILO)
PILO 1: Demonstrate the capacity for self-directed learning	
PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology	
PILO 3: Demonstrate critical thinking skills	
PILO 4: Interpret information and numerical data	
PILO 5: Produce structured, well-organised and fluent text	
PILO 6: Demonstrate effective oral communication skills	
PILO 7: Demonstrate an ability to work effectively in a team	
PILO 8: Recognise important characteristics of their own culture(s) and at least one other culture, and their impact on global issues	
PILO 9: Value ethical and socially responsible actions	
PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation	

GE course leaders should cover the mandatory PILOs for the GE area (Area 1: Arts and Humanities; Area 2: Study of Societies, Social and Business Organisations; Area 3: Science and Technology) for which they have classified their course; for quality assurance purposes, they are advised to carefully consider if it is beneficial to claim any coverage of additional PILOs. General advice would be to restrict PILOs to only the essential ones. (Please refer to the curricular mapping of GE programme: http://www.cityu.edu.hk/edge/ge/faculty/curricular_mapping.htm.)

B. Please select an assessment task for collecting evidence of student achievement for quality assurance purposes. Please retain at least one sample of student achievement across a period of three years.

Selected Assessment Task