

Course Syllabus

**offered by Department of Chemistry
with effect from Semester A 2020/21**

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: Dr. WONG Chun-Yuen Academic Unit: Department of Chemistry

Phone/email: 34426831/acywong@cityu.edu.hk Date: 18 November 2019

**City University of Hong Kong
Course Syllabus**

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with effect from Semester A 2020/21**

Part I Course Overview

Course Title:	Science, Buddhism, and Life
Course Code:	GE1353
Course Duration:	1 semester
Credit Units:	3
Level:	B1
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 checked="" type="checkbox"/> Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: <i>(Course Code and Title)</i>	English
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)

Science is an intellectual activity to investigate the natural world and its phenomena. More specifically, science is a systematic observation of natural events and conditions in order to (1) discover facts about them and to (2) formulate laws and principles based on these facts. Although science and religion are sometimes in conflict, Buddhism is found to be unusually science-friendly. Buddhism is not only known as a religion but a philosophy and a way of life. Many famous scientists and philosophers including Albert Einstein, Charles Darwin, and Bertrand Russell, also suggested that many elements of Buddhism are considered scientific and are not outside the domain of science. This course aims to introduce the scientific approach to knowledge generation and the basic teaching of Buddha. The students will then be guided into critical analysis of the conflict and compatibility between science and Buddhism in different aspects. Importantly, students will learn to apply scientific and Buddhist philosophies to daily life and modern issues.

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.	Explain the scientific approach to knowledge generation	20%	√	√	
2.	Identify the basic teaching of Buddha	20%	√	√	
3.	Compare and contrast the scientific and Buddhist approach to rationalize phenomena	30%		√	√
4.	Apply scientific and Buddhist philosophies to daily life and modern issues	30%		√	√
		100%			

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

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	2	3	4			
Lectures	Interactive lectures on the basic ideas in science and Buddhism	√	√					2 hrs/week
In-class and Online Discussions	Interactive discussion and/or debate on the conflict and compatibility between science and Buddhism	√	√	√				1 hr/week
Group Project	Group presentation on a selected Buddhist doctrine and its relationship with modern scientific ideas	√	√	√	√			
Critique Writing	Write a critique on a selected Buddhist scripture	√	√	√	√			
Buddhist Seminar/ Guest Lecture	To attend a Buddhist talk/seminar or a guest lecture		√	√	√			

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	2	3	4				
Continuous Assessment: 70%								
In-class and Online Discussions	√	√	√	√			20%	
Group Project			√	√			20%	
Critique Writing			√	√			20%	
Buddhist Seminar / Guest Lecture Written Report	√	√	√	√			10%	
Examination: 30%								
1 hour examination	√	√	√	√			30%	

* The weightings should add up to 100%.

100%

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

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

Grade	Grade Definitions	
A+ A A-	Excellent	Student completes all the assessment tasks/activities (in-class and online discussions, critique writing, group presentations, seminar written report, and examination) and demonstrates excellent grasp of the important concepts to various aspects of the topic covered in this course, and can apply these concepts to solve problems with clear and logical explanations. Strong evidence of superior writing and presentation skills.
B+ B B-	Good	Student completes all assessment tasks/activities and can describe and explain the important concepts to several aspects of the topic covered in this course. Shows, to some extent, the ability to use concepts for rationalization and to solve problems. Displays effective writing and presentation skills.
C+ C C-	Fair	Student completes most of the assessment tasks/activities and can describe some key elements on the topics covered in the course. Shows limited ability to apply concepts, and competent writing and presentation skills.
D	Marginal	Student has little participation and interest, and demonstrates limited ability in analysis.
F	Failure	Student has no participation, interest or original thought.

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.)

Science: logics; observations; hypotheses; experiments; theories; models; laws; Occam’s razor; scope of investigation; predictions.

Buddhism: impermanence; dissatisfactory; no-self; dharma; karma; the Four Noble Truths; the Eightfold Path; the Five Aggregates; the Twelve Links; dependent arising; Nirvana; meditation.

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.	Philosophy of Science: Very Short Introduction (ISBN-13: 978-0198745587)
2.	An Introduction to Buddhism: Teachings, History and Practices (ISBN-13: 978-0521676748)

2.2 Additional Readings

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

1.	Buddhism and Science (ISBN-13: 978-0231123358)
2.	Buddhism: Introducing the Buddhist Experience (ISBN-13: 978-0199861873)
3.	The Heart Sutra explained (ISBN-13: 978-0887065903)
4.	The Diamond Sutra (ISBN-13: 978-1582432564)
5.	The Fundamental Teachings of Early Buddhism: A Comparative Study Based on the Sutranga Portion of the Pali Samyutta-Nikaya and the Chinese Samyuktagama (ISBN-13: 978-3447042321)

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	CILOS 1, 2, 3, 4
PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology	CILOS 1, 2
PILO 3: Demonstrate critical thinking skills	CILOS 3, 4
PILO 4: Interpret information and numerical data	CILOS 1, 2
PILO 5: Produce structured, well-organised and fluent text	CILOS 3, 4
PILO 6: Demonstrate effective oral communication skills	CILOS 3, 4
PILO 7: Demonstrate an ability to work effectively in a team	CILOS 3, 4
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	CILO 4
PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation	CILOS 3, 4

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
Group project and presentation on a selected Buddhist doctrine and its relationship with modern scientific ideas.