# City University of Hong Kong Course Syllabus

# offered by Department of Physics with effect from Semester A 2022/23

Part I Course Over	view							
Course Title:	Special Topics in Physics							
Course Code:	PHY8273							
Course Duration:	One Semester							
Credit Units:	3							
Level:	R8							
Medium of Instruction:	English							
Medium of Assessment:	English							
Prerequisites: (Course Code and Title)	Nil							
Precursors: (Course Code and Title)	Nil							
<b>Equivalent Courses</b> : (Course Code and Title)	Nil							
Exclusive Courses:	Nil							

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#### Part II Course Details

### 1. Abstract

This is an advanced course on a contemporary topic in Pure and/or Applied Physics. The topic will be announced in advance when this course is offered. It will provide a useful supplement to the advanced courses already specified in the programme and to motivate the students for discovery and innovation.

## 2. Course Intended Learning Outcomes (CILOs)

No.	CILOs	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick wher appropriate)		lated omes
			A1	A2	A3
1.	Be aware of the current development in selected areas	20	$\checkmark$		
	in Physics.				
2.	Relate the covered progress to fundamental principles	30	$\sqrt{}$	$\sqrt{}$	<b>V</b>
	in Physics.				
3.	Apply some of the current development in new and	30	V	$\sqrt{}$	<b>V</b>
	useful applications.				
4	Identify state-of-the-art developments in the relevant	20	<b>V</b>	<b>√</b>	<b>V</b>
	area and to form opinions on specific issues, and				
	participate in discovery and innovation.				
•	•	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. Teaching and Learning Activities (TLAs)

TLA	Brief Description	CILO No.					Hours/week	
		1	2	3	4			(if applicable)
1	Lecture		$\sqrt{}$	$\sqrt{}$		26/semester	1	Lecture
2	Tutorial	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	13/semester	2	Tutorial

# 4. Assessment Tasks/Activities (ATs)

Assessment Tasks/Activities	CILO No.						Weighting*	Remarks
	1 2 3 4							
Continuous Assessment: 100%								
Written reports	$\checkmark$	$\checkmark$	$\checkmark$				80%	
Oral presentations	<b>√</b>	<b>V</b>		V			20%	
Examination: 0%								

100%

## 5. Assessment Rubrics

# Applicable to students admitted in Semester A 2022/23 and thereafter

Assessment Task	Criterion	Excellent	Good	Marginal	Failure
		(A+, A, A-)	(B+, B)	(B-, C+, C)	(F)
1. Written reports	The student can thoroughly	High	Moderate	Basic	Not reaching marginal
	identify and explain how the				level
	principles are applied to				
	science and technology for				
	solving physics and				
	engineering problems.				
2. Oral	The student can thoroughly	High	Moderate	Basic	Not reaching marginal
presentations	identify and explain how the				level
	principles are applied to				
	science and technology for				
	solving physics and				
	engineering problems.				

# Applicable to students admitted before Semester A 2022/23

Assessment Task	Criterion	Excellent	Good	Fair	Marginal	Failure
		(A+, A, A-)	(B+, B, B-)	(C+, C, C-)	(D)	(F)
1. Written reports	The student can thoroughly	High	Significant	Moderate	Basic	Not reaching
	identify and explain how the					marginal level
	principles are applied to					
	science and technology for					
	solving physics and					
	engineering problems.					
2. Oral	The student can thoroughly	High	Significant	Moderate	Basic	Not reaching
presentations	identify and explain how the					marginal level
	principles are applied to					
	science and technology for					
	solving physics and					
	engineering problems.					

## Part III Other Information

# 1. Keyword Syllabus

To be specified once the topic is fixed.

- 2. Reading List
- 2.1 Compulsory Readings

# 2.2 Additional Readings

To be specified.