

City University of Hong Kong
Course Syllabus

offered by Department of Materials Science and Engineering
with effect from Semester A 2019/20

Part I Course Overview

Course Title:	Postgraduate Seminar
Course Code:	MSE8004
Course Duration:	Two Semesters
Credit Units:	2
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)	AP8004 Postgraduate Seminar
Exclusive Courses: (Course Code and Title)	Nil

Part II Course Details

1. Abstract

The course aims to broaden the scientific horizon of postgraduate students in the fields of physics and materials science via active participation on research and scientific seminars. This course is a scientific forum for postgraduate students to exchange research information and to discuss scientific problems. The course is designed to develop the communication skills at presentation of research and scientific work. It provides the basic principles for: (i) effective abstract preparation; (ii) logically organized presentation of research work; (iii) development of efficient presentation techniques; and iv) active and adequate moderation of scientific discussions. It contributes to the systematic building of self-confidence and the rational and logical presentation of research results as well as the defence of the conclusions made.

2. Course Intended Learning Outcomes (CILOs)

No.	CILOs [#]	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Recognize different research methodologies, and experiment designs in multiple areas of research. Engage in a scientific presentation forum/discussion with a respectful attitude towards the ethical principles of research reporting and interaction.	25%	√		
2.	Apply the concept of the rational writing of abstracts announcing a scientific presentation.	25%		√	
3.	Develop the basic skills to present the topics of their own research discovery and innovation in an organized and rational manner, encourage the effective use of data and scientific principles to support rational conclusions as well as their defence in the discussion part of a research presentation.	25%		√	
4	Develop the ability to comment critically on other research presentations and provide constructive ideas to presenters. Build self-confidence in the public presentation and discussion of research and scientific work.	25%	√		
		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 (if applicable)
		1	2	3	4	
1	Lecture	✓				4
2	Seminar Activities		✓	✓	✓	22

The Postgraduate Seminar is the course conducted in both A and B semesters. The seminar is scheduled weekly with at least three different presentations in two hour blocks.

Scheduled activities: A semester: 12 × 2 h seminar
A semester: 1 × 2 h lecture
B semester: 12 × 2 h seminar
B semester: 1 × 2 h lecture

4. Assessment Tasks/Activities (ATs)

This is the pass-course: 100% coursework.

Assessment Tasks/Activities	CILO No.				Weighting*	Remarks
	1	2	3	4		
Continuous Assessment: 100%						
1. Written Presentation		✓			10%	
2. Oral Presentation	✓		✓		20%	
3. Active Discussion				✓	70%	
Examination: 0%						
* The weightings should add up to 100%.					100%	

The course comprises the teaching components in two sections that are focused on the effective communication of research objectives, methodology and results. It emphasizes the critical steps of abstract writing, experiment design, data analysis and synthesis, and efficient redaction of conclusions. Considerable attention is also given to the ethical principles of research reporting and interaction, such as the proper citation of work by others.

Individual tasks are assessed continuously during individual seminars and recorded on cards supplied to students for this purpose. The record cards contain attendance information, active discussion and seminar presentation. The chairman of the seminar is an appointed student, who introduces the presentations and leads the discussion. Each student can present and chair a couple of seminars during the course. Each oral presentation is preceded by writing an abstract. Abstract improvement is advised by the chairman of the given seminar and then by the course leader prior to internet posting for public announcement. Presentation topics are based on the research areas of individual postgraduate students.

The students are required to attend a minimum of 16 seminars and 2 lectures. A total of 26 seminar attendances is completed by joining 8 additional seminars either organized by the department or prescribed by the supervisors.

5. Assessment Rubrics

Assessment Task	Criterion	Pass (P)	Fail (F)
1. Written Presentation	The student is able to write his/her research presentation abstract in a rational and comprehensive manner.	The student completes all assessment tasks/activities	The student fails to complete the assessment tasks/activities
2. Oral Presentation	The student is able to: i) present his/her own research data; ii) interpret his/her data based on physical and scientific principles; iii) defend the conclusions reached.	The student completes all assessment tasks/activities	The student fails to complete the assessment tasks/activities
3. Active Discussion	The student has to attend 2 lectures and 26 seminars* including a minimum of 16 graduate seminars and 8 seminars organized by the department or prescribed by the supervisors (if otherwise). In addition, the student has to participate in at least 8 discussions to show he/she is able to take a critical view of presented materials and discuss them on a satisfactory level.	The student completes all assessment tasks/activities	The student fails to complete the assessment tasks/activities

* With due justifications, additional absence in the postgraduate seminar can be solved via participation in departmental seminar. Cases of long absence due to exchange studies, or other causes, will be solved on individual basis.

Part III Other Information

1. Keyword Syllabus

There is no fixed syllabus for this course. Presentation topics are based on the research areas of the postgraduates.

2. Reading List

2.1 Compulsory Readings

N/A

2.2 Additional Readings

N/A