**City University of Hong Kong**
**Course Syllabus**

**offered by School of Energy and Environment**
**with effect from Semester A 2017/18**

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**Part I Course Overview**

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|---|---|
| **Course Title:** | Scientific Writing and Communication |
| **Course Code**: | SEE8002 |
| **Course Duration:** | One semester |
| **Credit Units**: | 3 |
| **Level**: | R8 |
| **Proposed Area:** *(for GE courses only)* | ☐ Arts and Humanities<br>☐ Study of Societies, Social and Business Organisations<br>☐ Science and Technology |
| **Medium of Instruction:** | English |
| **Medium of Assessment:** | English |
| **Prerequisites**: *(Course Code and Title)* | Nil |
| **Precursors**: *(Course Code and Title)* | SEE8003 Skills for Scientists |
| **Equivalent Courses**: *(Course Code and Title)* | Nil |
| **Exclusive Courses**: *(Course Code and Title)* | Nil |

**Part II Course Details**

## 1. Abstract

The course aims to provide training in scientific writing and academic presentation skills, while broadening the scientific horizon of postgraduate students in the fields of energy and environment. Students are taught the basic principles of: (i) logical organization and presentation of research work; (ii) effective scientific writing and drawing; (iii) the scientific journal, submission and review processes; and (iv) development of effective presentation techniques. The course also contributes to the systematic building of self-confidence, providing rational and logical presentation of research results, as well as criticising or defending 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. | Recognise the objective and motivation of research work, and apply the principles of good scientific writing in presenting abstract, introduction, results, discussion conclusions, figures, tables and references. Students should also recognise the ethics in academic reporting and learn how to develop good habits in writing. | 70% | ✓ | ✓ | ✓ |
| 2. | Present the topics and results of their own research in an organized and rational manner, effectively use data and scientific principles to support rational conclusions and defend them in the discussion part of a research presentation. | 10% | | ✓ | |
| 3. | Comment critically on other research presentations and provide constructive ideas to presenters in a self-confident manner. | 10% | ✓ | | |
| 4 | Develop skills that enable effective conference attendance, present posters, chair sessions etc. | 10% | | ✓ | |
| | | 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)

| TLA | Brief Description | CILO No. | | | | Hours/week (if applicable) |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | |
| Lecture | Explain some of the key issues relevant to scientific writing and communication | ✓ | ✓ | ✓ | ✓ | 1.5 |
| In-class tasks | Small exercises to complete and present | ✓ | ✓ | ✓ | ✓ | 0.25 |
| Write MS | Write as a short paragraph | ✓ | ✓ | ✓ | | 1.0 |
| Defence of views | Be willing to argue in class about their observations | ✓ | ✓ | ✓ | ✓ | 0.25 |

## 4. Assessment Tasks/Activities (ATs)

| Assessment Tasks/Activities | CILO No. | | | | Weighting* | Remarks |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | |
| Continuous Assessment: 100% | | | | | | |
| Written MS | ✓ | ✓ | | | | Pass/Fail- no weighting |
| In class participation | | | ✓ | ✓ | | Pass/Fail- no weighting |
| Reflective practice | ✓ | ✓ | | | | Pass/Fail- no weighting |
| Examination: (duration: N/A hours , if applicable) | | | | | | |
| ** The weightings should add up to 100%.* | | | | | 100% | |

As this is a pass-fail course, students must pass all assessment tasks.

## 5. Assessment Rubrics

| Assessment Task* | Criterion | Pass | Fail |
|---|---|---|---|
| 1. Written MS | Student has grasped the basic principles of good scientific writing and recognise the ethics in scientific reporting. | Achieves the criterion | Fails to achieve the criterion t |
| 2.In-class participation | Student is able to confidently present research topic and findings in a rational manner, and is able to provide constructive comments to others | Achieves the criterion – requires attendance at >80% of classes | Fails to attend >80% of classes |
| 3. Short reflective reports on all classes | Student is able to reflect on the relevance of communication in their own specialist discipline. | Adequate reflection | Inadequate reflection |

*As this is a pass-fail course students must pass all assessment tasks

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

**1. Keyword Syllabus**

Nil

**2. Reading List**

**2.1 Compulsory Readings**

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|---|---|
| 1. | Ian Mills, Tomislav Cvita, Klaus Homann, Nikola Kallay And Kozo Kuchitsu, *Quantities, Units and Symbols in Physical Chemistry*, Blackwell |
| 2. | A range of on-line materials |

**2.2 Additional Readings**

Nil