

Course Syllabus
offered by School of Energy and Environment
with effect from Semester A 2020/21

Part I Course Overview

Course Title: Scientific Writing and Communication

Course Code: SEE8002

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) SEE8003 Skills for Scientists

Equivalent Courses:
(Course Code and Title) PHY8001 Survival Skills for Research Scientists
SM8402 Research Skills and Methods

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	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%			

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)					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

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

2.2 Additional Readings

Nil