FS2001: WORKSHOP-BASED STUDY IN SCIENCE AND ENGINEERING

Effective Term Semester A 2023/24

Part I Course Overview

Course Title Workshop-based Study in Science and Engineering

Subject Code FS - College of Engineering (FS) Course Number 2001

Academic Unit College of Engineering (EG)

College/School College of Engineering (EG)

Course Duration Non-standard Duration

Other Course Duration Seven weeks (requires no less than 100 hours of student direct participation)

Credit Units

Level B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction English

Medium of Assessment English

Prerequisites Nil

Precursors Nil

Equivalent Courses Nil

Exclusive Courses Nil

Part II Course Details

Abstract

This course is intended for students (both CityU and incoming exchange students) participating in summer schools, internships, focused workshops, etc, which can be held locally or overseas. Each student taking this course will be required to undertake a series of guided studies as assigned by the supervisor which will include reading and critique of selected literature related to the intended technical/scientific topic or theme. The student shall be directed to attend lectures/ seminars or other forms of teaching and learning activities as deemed appropriate by the supervisor. Individual course supervisors will determine the details of the TLAs and Assessment Tasks and provide guidance to the students, while the Course Leader will oversee and coordinate the activities and provide final assessment (individual supervisors will also be involved). The course is offered on a non-regular basis, and student registration is subject to the approval of the course leader.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe and analyze the scope, the significance and the state of the art knowledge of the intended technical/ scientific topic or theme			X	
2	Evaluate the implications of the proposed technical/ scientific knowledge and skills learned through oral presentation and written report			x	

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 real-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.

	TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Classroom activities	- Lectures - Conducting experiments in Laboratories or training centers - Group discussions	1, 2	Up to 60 hrs
2	Field trips	Visit to research institutes and laboratories, and industries	1, 2	Up to 10 days

Teaching and Learning Activities (TLAs)

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Progress report	1, 2	20	
2	Quiz	1, 2	20	
3	Oral presentation	1, 2	20	
4	Final written report	1, 2	40	

Continuous Assessment (%)

100

Examination (%)

0

Assessment Rubrics (AR)

Assessment Task

Progress report

Criterion

Ability to demonstrate an understanding of the topic, to present and analyse data, and to use scientific languages that skilfully communicate meaning to readers with clarity and fluency.

Failure (F)

Not even reaching marginal levels

Assessment Task

Quiz

Criterion Ability to show a good understanding of the topics in the quiz.

Failure (F)

Not even reaching marginal levels

Assessment Task

Oral Presentation

Criterion

Ability to clearly organize a presentation with cohesive content, to deliver a compelling presentation with confidence using different techniques (posture, gesture, eye contact, and vocal expressiveness), to understand the questions completely, and to answer the questions as precisely as they can be.

Failure (F)

Not even reaching marginal levels

Assessment Task Final written report

Criterion

Ability to demonstrate thorough understanding of the topic, to present and analyse data in excellent ways, and to use scientific languages that skilfully communicate meaning to readers with clarity and fluency.

Failure (F)

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

Science and technology; Discovery and innovation; Fundamentals of scientific research, Ethical issues on scientific and technology

Reading List

Compulsory Readings

	Title
1	Nil

Additional Readings

	Title
1	Nil