

SEE4999: SPECIAL PROJECT IN ENERGY AND ENVIRONMENT

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Special Project in Energy and Environment

Subject Code

SEE - School of Energy and Environment

Course Number

4999

Academic Unit

School of Energy and Environment (E2)

College/School

School of Energy and Environment (E2)

Course Duration

Two Semesters

Credit Units

0-6

Level

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

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

To be specified by the supervisor of the project

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to provide an opportunity for students to carry out in-depth study of an innovative topic that is related to energy and/or the environment under the supervision and guidance of an SEE academic member. Through this course, students will learn to work independently, apply and integrate knowledge acquired from other courses, think critically and creatively, and communicate their findings.

Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Define the scope of a study project	25		x
2	Conduct independent research and discover new knowledge	25	x	x
3	Critically analyze and integrate information and data	25	x	x
4	Effectively communicate their findings	25		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.

Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	There will be no formal lecture. The students are required to meet regularly with their faculty supervisors and be self-motivated in carrying out their study.	1, 2, 3, 4	Variable

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Written proposal	1	10
2	Presentation	2, 3, 4	45
3	Written report	2, 3, 4	45

Continuous Assessment (%)

100

Examination (%)

0

Examination Duration (Hours)

N/A

Additional Information for ATs

The written proposal is assessed by the student's supervisor during the early part of the semester. The oral presentation and final written report are assessed by the student's supervisor and another faculty member according to the comprehensiveness and competence of technical knowledge and understanding of the study topic.

Examination duration: N/A

Percentage of coursework, examination, etc.: 100% by coursework

To pass a course, a student must do ALL of the following:

- 1) obtain at least 30% of the total marks allocated towards coursework (combination of assignments, pop quizzes, term paper, lab reports and/ or quiz, if applicable);
- 2) obtain at least 30% of the total marks allocated towards final examination (if applicable); and
- 3) meet the criteria listed in the section on Assessment Rubrics.

Assessment Rubrics (AR)

Assessment Task

1. Written proposal

Criterion

Ability to formulate research questions and master the background of the project

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

2. Presentation

Criterion

Communicate verbally the rationale to conduct the study, experimental setup, data analysis, major findings, and conclusions

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

3. Written report

Criterion

Document the rationale to conduct the study, experimental setup, data analysis, major findings, and conclusions

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

Current topics in energy and/or environment; independent study

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	Nil