SEE3202: INTEGRATED SUSTAINABILITY

Effective Term
Semester A 2025/26

Part I Course Overview

Course Title
Integrated Sustainability

Subject Code
SEE - School of Energy and Environment

Course Number
3202

Academic Unit
School of Energy and Environment (E2)

College/School
School of Energy and Environment (E2)

Course Duration
One Semester

Credit Units
3

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 focuses on the production of a dissertation or report on a real-world case study that integrates the materials that students have learnt in the electives. It thus aims to provide the students with the knowledge and principles needed for the

successful integration of academic understanding into practical solutions for a sustainable world. It will be concerned with the notion of sustainable resources, ecosystems and energy, along with the notion of smart cities. The course introduces practical integration of the concepts of economics, social and cultural aspects of our lives with environmental and technical issues that we confront when trying to implement sustainable policy and regulation. The students will learn to apply fundamental understandings to a future sustainable world. They will need to think of adaptation and mitigation along with issues of fairness, intergenerational equity and ethics. There will be considerations of the lived experience of individuals and communities and citizens in response to projects that seek to address environmental problems they face in modern day cities. The course will take a participatory approach to understanding and assessing social sustainability, built on shared knowledge and values and will enable students to develop an understanding of social sustainability and the assessment of sustainability projects: critical awareness, varied conceptualisations and a multitude of perspectives. Topics covered include, quality of life and well-being; stakeholder and community engagement; researching the social world: theories and methods; sustainable lifestyles and sustainable behaviours; social values of the urban environment, qualitative research methodology. They will integrate these ideas and those addressed in their electives within a dissertation that can focus on the notion of integration in studies of sustainability.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explain the principles embodied in sustainable resources, ecosystems, energy and society more generally.		x		x
2	Demonstrate a knowledge and understanding of the social dimensions to sustainable change.		x	x	
3	Demonstrate the ability to critically examine and evaluate environmental projects in terms of sustainability and social impacts.		x	x	
4	Explore a participatory approach to understanding and assessing the sustainability of our society.			x	x
5	Apply their understandings to explain the factors and drivers for change in the human environment, through the use of case studies that form the basis of a dissertation.				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.

Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Students will learn about the principles embodied in integrating sustainable resources, ecosystems, energy and society	1, 2, 3, 4, 5	2
2	Tutorial	Students will learn through case studies and sample data sets, demonstrate techniques and application of smart environmental design	1, 2, 3, 4, 5	1
3	Analysis	Students will analyse a real case and will integrate their ideas with those addressed in their electives to produce a dissertation that focus on the studies of sustainability.	1, 2, 3, 4, 5	3

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Dissertation	1, 2, 3, 4, 5	60	-	Yes

Continuous Assessment (%)

60

Examination (%)

40

Examination Duration (Hours)

1.5

Minimum Continuous Assessment Passing Requirement (%)

30

Minimum Examination Passing Requirement (%)

30

Additional Information for ATs

Examination duration: 1.5 hrs Percentage of continuous assessment, examination, etc.: 60% by continuous assessment; 40% by exam To pass a course, a student must do ALL of the following: 1) obtain at least 30% of the total marks allocated towards continuous assessment (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. Dissertation Project

Criterion

Student dissertation will provide an overview of the situation investigated and make a thorough and integrated analysis of how sustainability might be achieved.

Excellent (A+, A, A-)

Student dissertation will provide a strong overview of the situation investigated and make a thorough and integrated analysis of how sustainability might be achieved.

Good (B+, B, B-)

Student dissertation will provide a good overview of the situation investigated and make a good and integrated analysis of how sustainability might be achieved.

Fair (C+, C, C-)

Student dissertation will provide a fair overview of the situation investigated and make a fair and integrated analysis of how sustainability might be achieved.

Marginal (D)

Student dissertation provide a poor overview of the situation investigated and make a poor and integrated analysis of how sustainability might be achieved.

Failure (F)

Student dissertation could not provide an overview of the situation investigated and unable to make a thorough and integrated analysis of how sustainability might be achieved.

Assessment Task

2. Examination

Criterion

- Clear and concise written answer, showing knowledge of theoretical background and context
- Where relevant evidence of strong technical understanding of subject and operational procedures
- Where possible give relevant examples and case studies that support argument and answer
- Good spelling and grammar, and structure of ideas

Excellent (A+, A, A-)

- Clear and concise written answer, showing knowledge of theoretical background and context
- Where relevant evidence of strong technical understanding of subject and operational procedures
- Where possible give relevant examples and case studies that support argument and answer
- Good spelling and grammar, and structure of ideas

Good (B+, B, B-)

- A reasonable and fair written answer, showing knowledge of theoretical background and context
- Where relevant evidence of good technical understanding of subject and operational procedures
- Where possible give relevant examples and case studies that support argument and answer
- Good spelling and grammar, and structure of ideas

Fair (C+, C, C-)

- A reasonable and fair written answer, showing knowledge of theoretical background and context
- Where relevant evidence of fair technical understanding of subject and operational procedures
- Good spelling and grammar, and structure of ideas

Marginal (D)

- A reasonable and fair written answer, showing knowledge of theoretical background and context
- Good spelling and grammar, and structure of ideas

Failure (F)

Not even reaching marginal level

Part III Other Information

Keyword Syllabus

Quality of life and well-being; stakeholder and community engagement; researching the social world: theories and methods; sustainable lifestyles and sustainable behaviours; social values of the urban environment, qualitative research methodology

Reading List

Compulsory Readings

	Title
1	This will develop from specific readings necessary for the case study the students choose to examine.

Additional Readings

	Title
1	Nil