# **SEE6201: ENVIRONMENTAL AND ENERGY POLICY**

**Effective Term** Semester B 2024/25

# Part I Course Overview

**Course Title** Environmental and Energy Policy

Subject Code SEE - School of Energy and Environment Course Number 6201

Academic Unit School of Energy and Environment (E2)

**College/School** School of Energy and Environment (E2)

**Course Duration** One Semester

**Credit Units** 3

Level P5, P6 - Postgraduate Degree

Medium of Instruction English

Medium of Assessment English

**Prerequisites** Nil

**Precursors** Nil

**Equivalent Courses** Nil

**Exclusive Courses** Nil

# Part II Course Details

Abstract

Theoretical frameworks and empirical studies are introduced to understand policy instruments for environmental protection and energy security. The principles of energy and environmental policies are discussed, drawing on historical developments as well as contemporary cases. Policy instruments including command-and-control, tax, subsidy and emission trading, are evaluated through empirical examination of past experiences in different countries and industrial sectors. Systemic approaches to designing and implementing policies for energy and environmental innovation are explored in the context of the accelerating rate of technological change and globalization of economic activities.

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Identify, describe and elaborate the overall structure of issues and problems related to energy and the environment in technological, economic and social contexts	20	x	x	
2	Apply the concepts, methodologies and practical tools of public policy to various issues and problems of energy and the environment	20	x	x	
3	Design, construct and critically evaluate policy options and alternatives for tackling energy and environmental issues and problems	20		x	x
4	Articulate the drivers and challenges that influence the process of policy making, include agenda setting, policy formulation, implementation and feedback	20		x	x
5	Demonstrate critical reasoning and constructive dialogues in interpersonal communication, oral presentations and short essays	20	x	x	x

# Course Intended Learning Outcomes (CILOs)

# 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.

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Interactive lectures	Explaining key concepts, methodologies and practical tools of public policy concerning energy and environmental issues	1, 2, 3, 4, 5	2h/week

# Learning and Teaching Activities (LTAs)

2	In-class exercises	Applying and communicating the knowledge to tackle various problems and challenges concerning energy and the environment	1, 2, 3, 4, 5	1h/week
3	Assignment	Consolidating the knowledge obtained through the lectures, discussions and learning materials	1, 2, 3, 4, 5	
4	Group project	Identifying an issue related to energy and the environment and working to propose policies to address the challenges involved	1, 2, 3, 4, 5	

# Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Class participation	1, 2, 3, 4, 5	10	
2	Assignment	1, 2, 3, 4, 5	20	
3	Group project	1, 2, 3, 4, 5	20	

# Continuous Assessment (%)

50

#### Examination (%)

50

# **Examination Duration (Hours)**

2

# Additional Information for ATs

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

1) should not miss more than 3 lectures;

2) 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);

3) obtain at least 30% of the total marks allocated towards final examination (if applicable); and

4) meet the criteria listed in the section on Assessment Rubrics.

# Assessment Rubrics (AR)

#### Assessment Task

Assignment (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

# Criterion

Ability to understand the concepts, methodologies, and tools of public policy

# 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

Group project (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

# Criterion

Ability to identify an issue concerning energy and the environment, analyse the structure of the problem and propose a solution to it

# 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

Examination (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

# Criterion

Ability to apply the knowledge obtained through interactive lectures, reading materials and group discussions to energy and environmental issues

# 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

Assignment (for students admitted from Semester A 2022/23 to Summer Term 2024)

# Criterion

Ability to understand the concepts, methodologies, and tools of public policy

Excellent (A+, A, A-) High

Good (B+, B) Moderate

Marginal (B-, C+, C) Basic

**Failure** (F) Not even reaching marginal levels

# Assessment Task

Group project (for students admitted from Semester A 2022/23 to Summer Term 2024)

# Criterion

Ability to identify an issue concerning energy and the environment, analyse the structure of the problem and propose a solution to it

Excellent

(A+, A, A-) High

# Good

(B+, B) Moderate

# Marginal

(B-, C+, C) Basic

# Failure

(F) Not even reaching marginal levels

# Assessment Task

Examination (for students admitted from Semester A 2022/23 to Summer Term 2024)

# Criterion

Ability to apply the knowledge obtained through interactive lectures, reading materials and group discussions to energy and environmental issues

# Excellent

(A+, A, A-) High

#### Good

(B+, B) Moderate

# Marginal

(B-, C+, C) Basic

# Failure

(F) Not even reaching marginal levels

# Part III Other Information

# **Keyword Syllabus**

- · Rationales for public policy
- · Instruments of energy and environmental policy including emission trading and carbon tax
- · Processes of policy making
- · Policy evaluation and assessment
- · Social choice theory and methods
- · Case studies of energy and environmental policies
- · International climate policies including Kyoto Protocol, Clean Development Mechanism, Paris Convention

# **Reading List**

# **Compulsory Readings**

	Title
1	Robert Falkner, ed., The Handbook of Global Climate and Environmental Policy, Wiley-Blackwell (2016).
2	Tietenberg T. and Lewis L. : Environmental Economics and Policy, Pearson Education, 6th ed., 2010
3	Scott J. Callan, Janet M. Thomas. Environmental Economics and Management: Theory, Policy and Applications, South-Western College Pub (2012).

# **Additional Readings**

	Title
1	Michael E. Kraft and Scott R. Furlong, Public Policy: Politics, Analytics, and Alternatives, Fifth Edition Sage (2015).
2	Perman R., Ma Y. and McGuilvray J. : Natural Resources and Environmental Economics, Pearson Education 3rd ed., 2011
3	Jane Roberts, Environmental Policy, Second Edition Routledge (2011).
4	Organisation for Economic Co-operation and Development, Tradeable permits policy evaluation, design and reform (Paris: OECD, 2004).