

CA5217: ENVIRONMENTAL ECONOMICS, PLANNING AND POLICY

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Environmental Economics, Planning and Policy

Subject Code

CA - Civil and Architectural Engineering

Course Number

5217

Academic Unit

Architecture and Civil Engineering (CA)

College/School

College of Engineering (EG)

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

This course builds on fundamental economic theory to develop analytic tools of analysis for policy problems on environmental and planning issues. The course discusses the roles of governments in dealing with environmental and planning problems. Both classical and contemporary economic issues will be covered in this module.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if DEC-A1 app.)		DEC-A2	DEC-A3
1	Explain the basic economic concept: supply, demand, consumer choice, etc;			x	x
2	Explore how markets work and why markets are efficient;		x	x	
3	Explore the conditions and implications of markets failure;			x	x
4	Apply economic theory to environmental and planning issues.		x	x	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	Lectures	Students will gain knowledge about microeconomics and environmental economics, and learn how to apply economic concepts to assess environmental policy.	1, 2, 3, 4	
2	Tutorials	Students will engage in class discussions and activities on solving environmental problems related to lecture themes.	1, 2, 3, 4	

Additional Information for LTAs

Semester Hours: 3 hours per week

Lecture/Tutorial/Laboratory Mix: Lecture (2); Tutorial (1); Laboratory (0)

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Mid-term quiz	1, 2, 3, 4	50	

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Additional Information for ATs

To pass a course, a student must obtain minimum marks of 30% in both coursework and examination components, and an overall mark of at least 40%

Assessment Rubrics (AR)**Assessment Task**

Mid-term quiz (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Ability to understand and apply theories and knowledge to topics related to market system

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 understand and apply theories and knowledge to topics related to market failure

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

Mid-term quiz (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Ability to understand and apply theories and knowledge to topics related to market system

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

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 understand and apply theories and knowledge to topics related to market failure

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure

(F) Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

Supply, demand, consumer theory, firm theory, market efficiency, market failure, monopoly, information asymmetry, externalities, environmental policies, planning policies, cost and benefit analysis etc.

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	Field, Barry & Martha K Field. 2008. Environmental Economics, McGraw-Hill/Irwin, 5th edition.
2	Mankiw, G. Principles of Microeconomics, any edition.
3	Keohane, Nathaniel O. and Sheila M. Olmstead. 2016. Markets and the Environment. (2nd ed.) Island Press.