

ECO302 Cost-Benefit Analysis and Sustainability

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JULY

Synopsis:

ECO302 Cost-Benefit Analysis and Sustainability addresses environmental issues using economic frameworks, and covers the analytical tool of Cost-Benefit Analysis (CBA). Within which, students will learn the steps of conducting CBA, such as valuation methods of travel cost method, contingent valuation method, and hedonic pricing method. While CBA's objective is economic efficiency, adjustments for equity and uncertainty are also considered. The course will also cover sustainability issues, including its relation to energy: energy and firm/market structures, modelling energy demand and supply, and what it means for the macroeconomy.

Topics:

- Externalities, market failures, and the environment
- Environmental policy interventions
- The steps of Cost-Benefit Analysis (CBA)
- Concepts of benefits and costs
- Valuation using revealed preference approaches
- Valuation using stated preference approaches
- Temporal discounting in CBA, and investment decision criterion
- Equity and uncertainty concerns in CBA
- Notions of sustainability
- Energy and market structure
- Modelling energy demand and supply
- Energy and the macroeconomic implications

Learning Outcome:

- Propose economic and command-and-control policy instruments for environmental problems
- Discuss the strengths and limitations of Cost-Benefit Analysis, including of various valuation methods and strategies to deal with uncertainty
- Distinguish between the concepts of sustainability
- Examine environment issues using analytical frameworks of marginal costs and benefits, and damage schedules and abatement costs
- Appraise the total economic impacts of projects using the steps of Cost-Benefit Analysis
- Infer the demand and supply of energy, in relation to market structures, and its macroeconomic implications

Assessment Strategies - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2

Overall Continuous Assessment	PRE-CLASS QUIZ 2	2
	PRE-CLASS QUIZ 3	2
	PARTICIPATION 1	6
	TUTOR-MARKED ASSIGNMENT 1	18
	GROUP BASED ASSIGNMENT 1	20
Overall Examinable Components	ECA-REPORT	32.5
	ECA-POWERPOINT	5
	ECA-VIDEO	12.5
Total		100

*The information listed is subject to review and change.