


INTRODUCTION TO ENVIRONMENTAL ECONOMICS

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TYPE OF COURSE : Rerun | Elective | UG/PG
COURSE DURATION : 12 weeks (24 Jan' 22 - 15 Apr' 22)
EXAM DATE : 24 Apr 2022

INTENDED AUDIENCE : BE/Btech/MSc Students
INDUSTRIES APPLICABLE TO : NTPC/NALCO/Coal India/ONGC/SAIL/Green Industries

COURSE OUTLINE :
We are going through so many issues and debates in the context of economy, development and the environment. In this respect, the course deals in understanding the complexity among the economy, economic activities and the environmental systems. Basic theories of environmental and collective goods; environment, economic growth and development linkage; welfare economics dealing with environmental valuation, environmental regulations policy highlighting the economics of pollution will be dealt at length.

ABOUT INSTRUCTOR :
Prof. Diptimayee Nayak: I did my PhD from IIT Delhi and my research interests are in the broad areas of environmental economics- ecosystem services, non-market environmental valuations, environmental policy and sustainability
Prof. S. P. Singh: I am teaching economics since last 25 years and my research interest fringe into broad development and policy issues addressing agricultural, environmental and rural development.

COURSE PLAN :

Week 1 : Meaning, Definition and Relevance of Environmental Economics; Basic Concepts and Tools from Microeconomics and Welfare economics; Comparison with Other Sub-disciplines like Ecological Economics and Natural Resource Economics; Major Problems and Key Concerns of Environmental Economics; Commons and Collective Actions Problem: Seminal Theories (Part-1)
Week 2 : Commons and Collective Actions Problem: Seminal Theories (Part-2 & 3); Mancur Olson's Theory of Collective Action; Collective Action and Prisoner's Dilemma Game; Governing the Commons: The Evolution of Institutions for Collective Action (Part-1)
Week 3 : Governing the Commons: The Evolution of Institutions for Collective Action (Part-2); Environmental Goods and Ecosystem Services; Ecological Footprints
Week 4 : Poverty, Environment and Economic Growth Linkages-Environmental Kuznets Curve
Week 5 : Environmental Sustainability; Environmental Performance Index; Benefit-cost Analysis
Week 6 : Consumer Demand of Environmental Goods and Welfare Effects of Price Change; Values, Environmental Values and Non-market Valuations: Revealed Preference Methods (Part-1)
Week 7 : Environmental Values and Non-market Valuations: Revealed Preference Methods (Part-2); Stated Preference Methods
Week 8 : Market-efficiency, Optimality, Consumers and Producers Surplus
Week 9 : Optimal Provision of public Goods and Bads; Externality and Market Failure; Pigouvian Fee
Week 10 : Property Rights and Coase Theorem; Environmental Regulation and Basic Regulatory Instruments: Introduction
Week 11 : Command and Control Approach; Environmental Regulations and Basic Regulatory Instruments-Market-based Instruments/Approaches (Part 1 & 2)
Week 12 : Environmental Regulations and Basic Regulatory Instruments-Market-based Instruments/ Approaches (Part 3 & 4); Environmental Regulation and Basic Regulatory Instruments-Market Trading Systems