

**Course No.** ECONA316  
**Course title:** Environmental Economics  
**Nature of Course:** GEC – 4  
**Number of credits:** 6  
**Number of Lectures (L): Practical (P): Tutorial (T):** 44:0:16

### Course Description

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. The course does not require any prior knowledge of economics. The course will be useful for students aiming towards careers in the government sector, NGOs, policy analysis, business and journalism.

### Course Outline

Unit	Title	Credits	
		L	T
I.	<b>Introduction to Environmental Economics</b> Introduction; The economy and the environment: inter-linkages; First two laws of thermodynamics. Environment as a necessity and luxury – population and environment linkage. Economic Efficiency and Market Failures: Environment quality as a public good, Private and Social cost, Pareto optimality and market failure in the presence of externalities; Economic Efficiency, Deviation from Efficiency; Common property	11	4
II.	<b>Population, Pollution and Environment</b> Theory of Demographic Transition; Economics of Pollution: Damage functions and abatement cost functions; Marginal decisions; Optimal level of pollution; Market solutions and government actions; Economic incentives and least-cost solutions; Command and control policies. Environmental issues in developed and developing countries; Use of Resources; Environmental Protection laws; Environmental Education and its merits.	12	4
III.	<b>Valuing the Environment</b> Economic valuation of environmental goods; Types of environmental values; Monetary valuation techniques; Non-monetary valuation techniques; Comparing methodologies. Cost-Benefit Analysis and the Environment: The theory of cost-benefit analysis; Idea of discounting and choice of discount rate; Framework for cost-benefit analysis; Discounting and future generations.	10	4
IV.	<b>Economic Growth and Sustainable Development</b> Economic growth, development and sustainable development; The environmental Kuznets curve; Economics of sustainable development. International Environmental Issues: Economics of climate change; Trade and the environment. Indian environment policies and performance, pollution control boards and their functions.	11	4

### **Suggested Readings:**

1. Kolstad, C.D. (2007), Environmental Economics, Oxford University Press, New Delhi.
2. Nick Hanley et al (2007), Environmental Economics: Theory and Practice, Palgrave MacMillan.
3. Katar Singh and Anil Sisodia (2007), *Environmental Economics: Theory and Application*, Sage Publications, New Delhi.
4. Karpagam (2008), Environmental Economics, Sterling Publishers. New Delhi
5. R.K. Lekhi et al. (2008), Development and Environmental Economics, Kalyani Publishers, Ludhiana.
6. S.P. Misra & S.N. Pandey (2008), Essential Environmental Studies, Ane Books, New Delhi.
7. Maureen L. Cropper and Wallace E. Oates, 1992, —Environmental Economics: A Survey, II Journal of Economic Literature, Volume 30:675-740.
8. Charles Kolstad, Intermediate Environmental Economics, Oxford University Press, 2nd edition, 2010.