

**KOLHAN UNIVERSITY
CHAIBASA**



**SYLLABUS FOR FYUGP, NEP – 2020
B. Sc. ENVIRONMENT AND WATER MANAGEMENT**

Designed By

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Subject : B. Sc. Environment & Water Management**Course Code: MDC - 1/2/3****Course: Environmental Economics****Learning Outcomes:**

1. Learner will understand the environmental issues in relation to the theory of externalities, public goods, and welfare.
2. Learner will be able to illustrate and examine economic principles concerning the choice of instruments for controlling pollution and the relative strength and weaknesses of environmental policies based on command-and-control vis-à-vis market-based instruments.
3. Learner will develop the concept of various approaches and methods developed for valuing environmental goods and services.
4. Learner can examine issues in the contemporary environmental discourse from an economists' point of view.

Unit	Topics	Details	Credit hours
1	Basics of Economics of Environment	Fundamental concepts in Environmental economics, Economy-environment interaction: Resource Economics, Circular flow model and Material Balance Model, Blue economy.	10
2	Environmental economics & trade	Main characteristics of environmental goods; marginal analysis; markets and market failure; social benefit, costs and welfare functions; social cost benefit analysis, Environmental Kuznet Curve, Krutilla Fisher Equation. Environmental trade implications, WTO & Global convergence.	11
3	Resource economics	Optimal use of exhaustible and renewable resources, Optimal provision of public goods-Lindahl's equilibrium; Energy and Environment – Resource Scarcity, Pricing of Resources.	12
4	Environmental valuation	Integrated environmental and Economic accounting and the measurement of environmentally corrected GDP, Use values, option values and non-use values -total economic value, Valuation techniques; production based, contingent valuation, hedonic-pricing, travel cost method, etc.	12
			45

References:

1. Basic concept of Environmental Economics, Dr. Y M Chudasma, Dr. S. Jhala
2. Environmental Economics, Bhattacharya.
3. World commission on Environment and Development “Our common future”. Oxford University Press publications.
4. The Economics of Pollution, Victor P.A ,Mathau, London Publication.
5. Principles of Environmental management, Rogene and Buchoiz, Prentice Hall Publications.