

## Lesson Plan

### **B.A 1<sup>st</sup> Semester 2024-2025**

Environmental Studies B23-VAC-201

Course Type: VAC

#### **Contents of the Course**

<b>Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
I.	Introduction to environmental studies: Multidisciplinary nature of environmental studies; Scope and importance, Concept of sustainability and sustainable development. Ecosystems: Definition, structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs, Major ecosystems types: Forest ecosystem, Grassland ecosystem, Desert ecosystem and Aquatic ecosystem (lakes, rivers, oceans).	06
II.	Natural resources: Renewable and Non-renewable Resources Land resources: Land degradation and soil erosion. Forest resources: Importance of forests, deforestation: causes and impacts on environment. Water resources: Use and over-exploitation of surface and ground water. Energy resources: Renewable and non-renewable energy sources. Biodiversity and Conservation: Definition and its types, Endangered and endemic species of India. Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation. biodiversity: In-situ and Ex-situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational values.	09
III.	Environmental pollution Environmental pollution: types, causes, effects and controls, Air, water, soil and noise pollution. Solid waste management: Sources, methods of disposal: Landfill, incineration and composting. Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture. Environmental Policies & Practices	08

	Environmental laws: Environment (Protection) Act, 1986, Air (Prevention & Control of Pollution) Act, 1981, Water (Prevention and control of Pollution) Act, 1974	
IV.	Human Communities and the Environment: Human population growth: Impacts on environment, human health and welfare. Resettlement and rehabilitation of project affected person. Disaster management: floods, earthquake, cyclones, landslides and drought. Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.	07

### Course Learning Outcomes (CLO)

After completing this course, the learner will be able to:

1. Understand the concept of environmental studies, sustainable development and ecosystem.
2. Learn about the various natural resources and about biodiversity and its conservation.
3. Know about the types of pollution, solid waste management, global environmental issues and environmental laws.
4. Understand the concept of population growth and its impacts on environment and disaster management

	Theory	Tutorial	Total
Credits	2	-	2
Internal Assessment Marks	15	-	15
End Term Exam Marks	35	-	35
Exam Time	3 Hrs.	-	3 Hrs.

Total number of questions set will be nine. Questions no. 1 is compulsory covering the entire syllabus. Two questions will be set from each unit. Students have to attempt five questions in all, selecting one question from each unit including the compulsory question. Each question is of 7 marks. All questions carry equal marks. Final theory exam time allowed will be of 3 hours.

### **Recommended Books/E-Resources/LMS:**

1. Kaushik, A & Kaushik, C.P. 2022. Perspectives in Environmental Studies. New Age International Pvt Ltd, New Delhi.
2. Bharucha, E. 2021. A Textbook of Environmental Studies for Undergraduate Courses, Orient Blackswan Pvt Ltd.
3. Goswami, P., Mandal, J. & Singh, S. 2022. A Textbook on Environmental Studies, Ashok book stall, Assam.
4. Joshi, P.C. & Joshi, N. 2009. A Text Book of Environmental Science. APH Publishing Corporation
5. Basu, M. & Xavier Savarimuthu, S.J. 2017. Fundamentals of Environmental Studies. Cambridge University Press.
5. Singh, R.P. & Islam, Z. 2012. Environmental Studies. Concept Publishing Company.

### **Tentative Lesson Schedule**

Months	Topics	Contact Hours
July 2024	Introduction to environmental studies: Multidisciplinary nature of environmental studies; Scope and importance, Concept of sustainability and sustainable development	02 Hours
August 2024	Ecosystems: Definition, structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs, Major ecosystems types: Forest ecosystem, Grassland ecosystem, Desert ecosystem and Aquatic ecosystem (lakes, rivers, oceans). Natural resources: Renewable and Non-renewable Resources Land resources: Land degradation and soil erosion. Forest resources: Importance of forests, deforestation: causes and impacts on environment. Water resources: Use and over-exploitation of surface and ground water. Energy resources: Renewable and non-renewable energy sources.	08 Hours
September 2024	Biodiversity and Conservation:	08 Hours

	<p>Definition and its types, Endangered and endemic species of India.</p> <p>Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation.biodiversity: In-situ and Ex-situ conservation of biodiversity.</p> <p>Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational values. Environmental pollutionEnvironmental pollution: types, causes, effects and controls, Air,water, soil and noise pollution. Solid waste management: Sources, methods of disposal: Landfill, Incineration and composting.</p>	
October 2024	<p>Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.</p> <p>Environmental Policies &amp; Practices</p> <p>Environmental laws: Environment (Protection) Act, 1986, Air (Prevention &amp; Control of Pollution) Act, 1981, Water (Prevention and control of Pollution) Act, 1974Human Communities and the Environment:</p> <p>Human population growth: Impacts on environment, human health and welfare.</p> <p>Resettlement and rehabilitation of project affected person.Disaster management: floods, earthquake, cyclones, landslides and drought.</p>	08 Hours
November 2024	<p>Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.</p>	04 Hours

***Gunjan Arora***  
***Extension lecturer of Commerce***  
***Govt. College for Women, Ambala City***