

Department of Liberal Education
Era University, Lucknow
Course Outline
Effective From: 2023-24

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| Name of the Program | B.A. / B.Sc. (LIBERAL EDUCATION) | | | Year/ Semester: | 1st / 1st |
| Course Name | Introduction to Environmental Science | Course Code: | EVA101 | Type: | Theory |
| Credits | 05 | | | Total Sessions Hours: | 75 Hours |
| Evaluation Spread | Internal Continuous Assessment: | 50 Marks | | End Term Exam: | 50 Marks |
| Type of Course | <input type="radio"/> Compulsory | <input checked="" type="radio"/> Core | <input type="radio"/> Creative | <input type="radio"/> Life Skill | |
| Course Objectives | <ol style="list-style-type: none"> To study about the environment and its components To develop a multidisciplinary vision for environment management and its sustainability To recognize the impact of human action on environment and develop environmental-social responsible attitude. | | | | |
| Course Outcomes (CO): <i>After the successful course completion, learners will develop following attributes:</i> | | | | | |
| Course Outcome (CO) | Attributes | | | | |
| CO1 | Learn and understand about environment, its components and their importance. | | | | |
| CO2 | Understand need for environmental consciousness and be able to think across the existing disciplinary boundaries. | | | | |
| CO3 | Learn the fundamental concepts of environment and its management practices. | | | | |
| CO4 | Students will sensitize with the persisting environmental challenges and their impacts and understand the relationship between society and environment. | | | | |
| Pedagogy | Interactive, discussion-based, student-centered, presentation. | | | | |
| Internal Evaluation Mode | Mid-term Examination: 20 Marks Activity: 10 Marks Class test: 05 Marks Online Test/Objective Test: 05 Marks Assignments/Presentation: 05 Marks Attendance: 05 Marks | | | | |
| Session Details | Topic | | | Hours | Mapped CO |
| Unit 1 | Introduction to Environment and its components <ul style="list-style-type: none"> Environment: Definition and concept; Structure and composition of atmosphere; Hydrosphere: Distribution and uses; Lithosphere: Structure, components and major processes; Biosphere: Definition & components. Activity: Locate major water bodies, mountain ranges and soil type distribution on map of India/World. | | | 18 | CO1 |

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| Unit 2 | Environmental awareness <ul style="list-style-type: none"> ● Environmental science, its goal and scope; ● Relationship of Environmental science with other disciplines; ● Need for Environmental awareness; ● Role of various institutions including government, NGOs & media in environment awareness ● Contemporary environmental issues: climate change, biodiversity loss, pollution Activity: To collect articles (5 articles) from different sources (Newspaper/magazines/online) and prepare a report to highlight the role of various institutes in creating environmental awareness. | 17 | CO2 |
| Unit 3 | Concepts related to Environment and Sustainability <ul style="list-style-type: none"> ● Environmental Justice and Environmentalism; ● Carbon-credit & carbon-trading ● Ecological footprint & carrying capacity; ● Sustainable Development & Environment; ● Environment, Social and Governance (ESG) framework Activity: List the ESG companies in India and their adopted environmental policies. | 20 | CO3 |
| Unit 4 | Man and Environment <ul style="list-style-type: none"> ● Understanding pollution: poverty, population & politics; ● Cultural and social interaction with environment; ● Development vs Environment degradation; ● Emerging technologies and environmental threats ● Green washing. Case study: McDonald paper straw Activity: EV is a sustainable option for environment – Debate. Two groups gather data and facts and debate for or against the adoption of electrical vehicles. | 20 | CO4 |

CO-PO and PSO Mapping

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 | PSO6 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| CO1 | 2 | | | | | | | | 2 | 1 | | | | |
| CO2 | 1 | | 2 | | | 1 | | | 3 | 2 | | 3 | | |
| CO3 | 2 | 2 | 2 | 2 | | 1 | | | 2 | 1 | 1 | 3 | 3 | |
| CO4 | 2 | 3 | 3 | 2 | | 3 | 2 | | 2 | 2 | 3 | | 1 | 1 |

Strongcontribution-3, Averagecontribution-2, Lowcontribution-1,

Suggested Readings:

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| Text- Books | <ol style="list-style-type: none"> 1. A text Book of Environment Studies, Asthana, D. K. and Asthana, M. 2006, S. Chand & Co. 2. Environmental Science: S. C. Santra, New Central Book Agency. |
| Reference Books | <ol style="list-style-type: none"> 1. Environmental Science: Earth as a Living Planet by Botkin and Keller; JOHN WILEY & SONS, INC. 2. Environmental Encyclopedia, Jaico Publication House, Mumbai, 1196p |
| Para Text | Unit 1: 1. Environmental Science-Definition and Scope- https://www.youtube.com/watch?v=kB0JA7jsqMw&ab_channel=Study.com |

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| | <p>Unit 2: 1. Carrying capacity- https://www.youtube.com/watch?v=ozW7yy6Ymw&ab_channel=MooMooMathandScience</p> <p>Unit 3: 1. Climate change- https://www.youtube.com/watch?v=EuwMB1Dal4&ab_channel=ClickView</p> <p>Unit 4: 1. Green washing and degradation of marine ecosystem- Sea Piracy (Netflix documentary)</p> |
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Recapitulation & Examination Pattern

Internal Continuous Assessment:

| Component | Marks | Pattern |
|-----------------------------|-----------|--|
| Mid-term Exam | 20 | Section A: Contains 10 MCQs/Fill in the blanks/One Word Answer/ True-False type of questions. Each question carries 0.5 marks. Section B: Contains 07 descriptive questions out of which 05 questions are to be attempted. Each question carries 03 marks. |
| Activity | 10 | Will be decided by subject teacher |
| Class Test | 05 | Contains 05 descriptive questions. Each question carries 01 marks. |
| Online Test/ Objective Test | 05 | Contains 10 multiple choice questions. Each question carries 0.5 marks. |
| Assignment/ Presentation | 05 | Assignment to be made on topics and instruction given by subject teacher |
| Attendance | 05 | As per policy |
| Total Marks | 50 | |

Course created by: **Dr. Swati Sachdev**

Signature:

Approved by: **Prof. Venkatesh Dutta**

Signature: