

St. Aloysius College (Autonomous), Jabalpur-M.P.
Department of Botany & Microbiology
I year

Foundation Course/

ENVIRONMENTAL EDUCATION/

PART A: Introduction			
Program:UG Level Certificate	Class: UG1 Year	Year: First year	Session 2021-22 onwards
Subject: Environmental Education			
1.	Course Code	XI-FCACIT	
2.	Course Title.	Environmental Education	
3.	Course Type (Core Course/ Elective/ Generic/ Elective/ Vocational	Foundation Course.	
4.	Pre-Requisite (if any).	A course intended to create awareness about the life of human beings which is an integral part of environment, and to inculcate the skills required to protect the environment from all sides	
5.	Course Learning Outcomes	<ol style="list-style-type: none"> 1. To understand various aspects of life forms, ecological processes, and the impacts on them by the human during Anthropocene era. 2. To build capabilities to identify relevant environmental issues, analyze the various underlying causes, evaluate the practices and policies and develop framework to make inform decisions. 3. To develop empathy for all life forms, awareness, and responsibility towards environmental protection and nature preservation 4. To develop the critical thinking for shaping strategies such as ; social, economic, administrative & legal environmental protection, conservation of biodiversity, environmental equity an sustainable development 5. To prepare for the competitive exams (CLO) 	
6.	Credit Value.	2 Credit	
7.	Total Marks	Max.Marks:50	Min Passing Marks:17

PART B: Content of the Course		
Total No. of Lectures-15 Hrs. (01 hours per week)		
Unit	Topics.	No. of lectures
I	<p>Environment and natural resources</p> <ul style="list-style-type: none"> • Multidisciplinary nature and scope and importance of environment. • Components of environment: atmosphere, hydrosphere, lithosphere and biosphere. • Brief account of natural resources and associated problems: land resources, water resources, energy resources. • Concept of sustainability and sustainable development. <p>Key words: Environment, forest, minerals, food, land, water, energy, sustainable development.</p>	5 Hrs
II	<p>Biome, ecosystem and biodiversity:</p> <ul style="list-style-type: none"> • Major Biomes Tropical, Temperate, Forest, Grassland, Desert, Tundra, Wetland Estuarine and Marine • Ecosystem Structure function and types their Preservation & restoration • Biodiversity and its conservation practices <p>Keywords : Biome, Ecosystem, Biodiversity</p>	4 Hrs
III	<p>Environmental Pollution, Management and Social Issues:</p> <ul style="list-style-type: none"> • Pollution Types, Control measures, Management and associated problems. • Environmental Law and Legislation: Protection and conservation Act International Agreement & Programme • Environmental Movements, communication and public awareness programme • National and international organizations related to environment conservation and monitoring • Role of information technology in environment and human health. <p>Keywords: Pollution, Environmental Legislation, Environmental movement, Environmental programme and organization.</p>	6 Hrs
	<p>Suggested activities: (at least one)</p> <ol style="list-style-type: none"> 1. Visit to an area to document environmental assets rivers/Sarest/flora/fauna 2. Visit to a local polluted site Urban/Rural/Industrial 3. Study of simple ecosystem 	

PART C: Learning Resources

Textbooks, Reference Books, Other Resources

- Singh S.P. and Gupta, S... Ecology invite Science and Conservation S Chand publication New Delhi (2015)
- Divan, S. and Rosencranz, A.. "Environmental Law and Policy in India Cases, Material & Status" Oxford University Prems India 2002) 200 Edition:
- Odum EP. Fundamentals of Ecology Philadelphia Studies (1971)
- Bharucha, Erach, "Environmental studies" Universities Press India Pvt. Ltd. Hyderabad (2014) (Hindi Edition also available)
- Kaushik, Anubha, Kaushik, C.P. "Perspectives in Environmental Studies "New Environmental Studies" New age International Publishers (2018), 6th Edition.
- Aathana, D. K Asthana Moma. "A Testbook of Environmental Studies", S. Chand. Publishing. Now Delhi (2007)
- National Digital Library (<http://ndl.iitkgp.ac.in/home/download>)
- Epg-pathshala . (<http://infiboet.ac.in/Home/Download>)
- NPTEL (<http:// nptel.ac.in/course.html>)
- Cousera (<https://www.coursera.org/search?query=environmental+science and page=1>)

Suggested equivalent online course

1. The Health Effects of Climate Change (edx)
2. Climate Change: Financial Risks and Opportunities (edx)
3. Introduction to Environmental Law and Policy (coursera)
4. Women in environmental biology (coursera)
5. Our Earth 's Climate, History, and Processes (coursera)
6. Ecology, physiology, environmental science (National digital library)

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