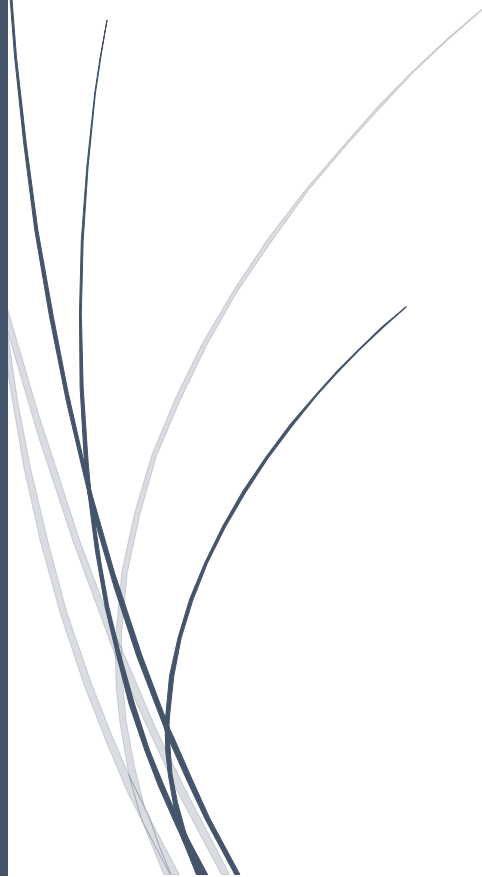


SDG 17



The advancement of the society in this age is only possible with mutual cooperation, collaboration, extending help to each section of the society and sharing of resources. The efficiency of achieving the SDGs become more while working in collaboration than an individual. This is true whether it is applicable for a person or an organization or a country. Wastage of resources must be zero and at the same time abundant resources must be generously shared with those not having access. This mutual cooperation is the fundamental principle of sustainability with involvement and participation of all. UN SDG17 aims to revitalize the global partnership for sustainable development. In line with UN SDG principle DIT University firmly believes in collaboration be it in research or resource sharing or implementation of its work culture not only inclusive but exclusive of University premises. The supportive and flexible work culture of DIT University essentially lies on the proposition of trust-integrity, employee engagement-opportunities, respect-fairness.

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University's Educational Initiatives to offer mandatory courses: on Sustainability Issues

DIT University believes that United Nations' sustainable development Goals (SDGs) are not only guiding principles for society but have to be implemented through education, research, technology innovation and execution at ground level. For this, the students are the best flag bearers and when they will learn the topics through various courses and do hands on training on various aspects of SDGs they will be able to understand its importance and will carry the inner message after passing out and implement effectively same in society through their career path and doable actions.

DIT University offers **Environmental science(CHF201)** course as mandatory course which is related to **SDG 3, 6, 11, 13, 14**. This course is taken by all students who are pursuing undergraduate degree at DIT University. The course teaches about environmental components, pollution sources, mitigation and sustainable approaches.

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<u>Environmental Science – CHF-201</u>	
Program: Bachelor Program (all branches) Year: I/IInd Year Semester: I/II/III/IV	
Subject Code	CHF 201
Marks	100
Number of Lecture Hours/Week	2
Total Number of Contact Hours	2x16 = 32
Credits	(L T P : 2 0 0)
Subject Objective:	
<p>To Impart basic knowledge about the environment and its allied problems and to develop an attitude of concern for the environment. Further the course structure will create the awareness about environmental problems among students and motivate the students to participate in environment protection and environment improvement programs. The course aims to develop skills to help the concerned individuals in identifying and solving environmental problems.</p>	
CHF-201 Environmental Science Course Outcome:	
<p>At the end of the course, <u>the student will be able to</u> :</p> <p>CO 1. Demonstrate depleting nature of Environmental Resources and Ecosystem concepts.</p> <p>CO 2. Able to identify the structure and functioning of natural ecosystems.</p> <p>CO 3. Establish man-wildlife harmonious relationship.</p> <p>CO 4. Adapt to 3R (Reuse, Recovery, Recycle). Identify the causes and control measures related to pollutions.</p> <p>CO 5. Illustrate and analyze various Case Studies related to Environmental issues and Env. Legislation.</p>	
Particulars	Hours
Unit 1: Basics of Environment and Natural Resources	

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<p>Definition and Concept of Environment, Multidisciplinary nature of environmental studies. Scope and importance of environmental studies, Need for public awareness, Environmental concerns and people. Introduction and classification of natural resources. Energy Resources, Water Resources, Land Resources, Forest Resources, Food Resources, Mineral Resources, Case studies related to over exploitation of resources and their impacts. Role of an individual in conservation of natural resources, Sustainable lifestyles.</p>	06
Unit 2: Ecosystems	
<p>Definition and concept of ecology, Structure and Function of an Ecosystem, Energy Flow in Ecosystems, Biogeochemical cycles (Nitrogen, Carbon, Phosphorus, Oxygen, Hydrological). Species interactions in ecosystems. Ecological succession and ecological pyramids. Characteristic features of grassland, pond, desert and forest ecosystems. Ecosystem services and conservation</p>	06
Unit 3: Biodiversity and its conservation	
<p>Introduction and types of biodiversity. Bio-geographic classification of India, Value and significance of biodiversity, Biodiversity at global, national and local levels, India: A mega-diversity nation, Biodiversity hotspots, Threats to Biodiversity: Poaching and man-wildlife conflicts, IUCN Red Data Book and endangered & endemic species of India. Biodiversity conservation strategies, Institutes and organizations.</p>	06
Unit-4 Environmental Pollutions:	
<p>Introduction and Definition. Causes, consequences and control measures of: Air pollution, Water pollution, Noise pollution, Nuclear pollution, Soil pollution, Thermal and Marine pollution. Solid waste management, Bio-medical waste management. Disasters and its mitigation strategies, Global warming, Climate change, Acid rain, Ozone depletion and Smog. Pollution case studies. Role of an individual in pollution prevention.</p>	06
Unit-5 Social Issues and Environment:	

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<p>Sustainable Development: Concept and importance, Environmental Impact Assessment (EIA), GIS, Remote sensing. Water conservation and rain water harvesting. Resettlement and rehabilitation problems, Environmental audit, eco-labeling and eco-friendly business. Environmental Legislation in India, Population explosion and its impact on environment and human health, Value Education and environmental ethics.</p>	04
<p>Field work</p> <ul style="list-style-type: none"> • Visit to a local area to document environmental asset: river/forest/grassland/hill/mountain • Visit to a local polluted site-Urban/Rural/Industrial/Agricultural • Study of common flora and fauna. • Study of a common ecosystem-pond, river, hill slopes, etc. 	04
TEXT BOOKS	
<ol style="list-style-type: none"> 1. Bharucha Erach, 2004. Textbook for Environmental Studies, University Grants Commission, New Delhi. 2. Kaushik A & Kaushik C P. 2007. Perspectives in Environmental Studies, New Age International Publ. 3. S. Deswal & A. Deswal 2015. A Basic Course in Environmental Studies. Dhanpat Rai & Co. 	
REFERENCE BOOKS	
<ol style="list-style-type: none"> 1. Miller T.G. Jr. 2002. Environmental Science, Wadsworth Publishing Co. (TB). 2. De A.K.,1996. Environmental Chemistry, Wiley Eastern Ltd. 3. Sharma, P.D. 2005. Ecology and environment, Rastogi Publication. 	

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