

# College of Non-Conventional Vocational Courses for Women, Kolhapur

Department of

## PROGRAMME SPECIFIC OUTCOMES

Sr. No.	Programme	Specific Outcome
1	B.Sc. (Environment Science) - CBCS	<ul style="list-style-type: none"><li>• This programme will lay strong foundation of environmental concepts for posts graduate education and research.</li><li>• Helps students in capacity building, developing environmental programmes /projects based on sound technical, environmental and policy matters of Government of India</li><li>• Develop ability to carry out experiments and provide efficient conclusions.</li><li>• Develop an approach to work for needs of society regarding environment, health, safety considerations.</li><li>• This programme will make students to understand the concept of sustainable development.</li><li>• This programme will provide in-depth knowledge to the students in respect of current environmental and safety problems faced by human society and to develop amongst students' scientific attitude based on interdisciplinary approach to enable them to take holistic view in decision taking.</li></ul>

## COURSE OUTCOMES

Class	Course Code / Course Name	Course Outcome
<b>B.Sc. (Environment Science) I: Semester I CBCS</b>	DSC-A1: Ecology and Ecosystem	<ul style="list-style-type: none"> <li>• Understand the basic concepts regarding ecology and ecosystem.</li> <li>• Get acquainted with biogeochemical cycles and succession.</li> </ul>
	DSC-A2: Natural Resources	<ul style="list-style-type: none"> <li>• Introduction to the concept of natural resources and its classification.</li> <li>• Understanding natural resources of India.</li> </ul>
	DSC-A3: Fundamentals of Geoscience	<ul style="list-style-type: none"> <li>• Understand origin of earth and different theories of evolution.</li> <li>• Awareness about various phenomena taking place in atmosphere.</li> </ul>
	DSC-A4: Fundamentals of Environmental Pollution I (Water)	<ul style="list-style-type: none"> <li>• Explain water pollution, its types and effects on living organisms and environment.</li> <li>• Analyse physico-chemical parameters in relation to water.</li> </ul>
	DSC-A5 – Fundamentals of Environmental Science	<ul style="list-style-type: none"> <li>• Get acquainted with interaction between man and environment.</li> <li>• Awareness about various environmental issues such as global warming, ozone depletion, deforestation etc.</li> </ul>
	DSC-A6– Soil Science	<ul style="list-style-type: none"> <li>• Understand the process of soil formation with respect to soil properties, soil chemistry.</li> <li>• Inculcation of various soil conservation practices and understanding other aspects such as bioremediation and biofertilizers.</li> </ul>
	DSC-A7 – Fundamentals of Environmental Chemistry	<ul style="list-style-type: none"> <li>• Understand the basic concepts and scope of environmental chemistry.</li> <li>• Study the mechanism of various equipments utilized for environmental analysis.</li> </ul>
	DSC-A8 – Fundamentals of Environmental Biology	<ul style="list-style-type: none"> <li>• Identify the scope and importance of environmental biology.</li> <li>• Awareness about ecological adaptations and marine biology.</li> </ul>

Class	Course Code / Course Name	Course Outcome
<b>B.Sc. (Environment Science) I-Sem II CBCS</b>	DSC-B1 – Fundamentals of Environmental pollution II (Air & Noise)	<ul style="list-style-type: none"> <li>• Study the sources and effects of air and noise pollution.</li> <li>• Explain the working of air pollution controlling devices and institutions working for the cause of environment.</li> </ul>
	DSC-B2 – Biological Diversity and Conservation	<ul style="list-style-type: none"> <li>• Study the concept, need, types and scope of biodiversity.</li> <li>• Know various biodiversity conservation measures and organizations working for it.</li> </ul>
	DSC-B3– Climate Change and Sustainable Development	<ul style="list-style-type: none"> <li>• Study the causes and effects of global environmental issues in relation to global warming and ozone depletion.</li> <li>• Inculcate the concept of sustainable development and practices.</li> </ul>
	DSC-B4 – Forest Management	<ul style="list-style-type: none"> <li>• Study the need of forest management and agroforestry, principles of forest management and legal aspects of forest management.</li> <li>• Understand the concept of silvicultural systems and management of forest resources.</li> </ul>
	DSC-B5 – Solid and Hazardous Waste Management	<ul style="list-style-type: none"> <li>• Study the fundamentals of solid and hazardous waste management.</li> <li>• Learning the rules and regulations of solid and hazardous waste.</li> </ul>
	DSC-B6 – Occupational Health & Safety	<ul style="list-style-type: none"> <li>• Get acquainted with importance of industrial safety to workers and use of PPE'S.</li> <li>• Making students to understand the methods of strategic planning for hazard prevention.</li> </ul>
	DSC-B7 – Remote Sensing & GIS	<ul style="list-style-type: none"> <li>• Introduction to remote sensing, GIS and satellites.</li> <li>• Study applications of Remote Sensing, GIS and satellites.</li> </ul>
	DSC-B8 – Computer Applications	<ul style="list-style-type: none"> <li>• Understand the basic concepts of hardware and software.</li> <li>• Learn various computer applications through report writing in MS word and presentation of data through Excel and power point.</li> </ul>

<b>Class</b>	<b>Course Code / Course Name</b>	<b>Course Outcome</b>
<b>B.Sc. (Environment Science) II: Semester III CBCS</b>	DSC-C1 – Disaster Management-1 (Natural)	<ul style="list-style-type: none"> <li>• Understand the concepts, effects and mitigation measures of natural disasters.</li> <li>• Get acquainted with assessment of hazards and legal aspects.</li> </ul>
	DSC-C2 – Biostatistics	<ul style="list-style-type: none"> <li>• Understanding use of statistical methods for environmental studies.</li> <li>• Understanding methods of collection and analysis of data.</li> </ul>
	DSC-C3 – Environmental Ethics and Environmental Issues	<ul style="list-style-type: none"> <li>• Understand the causes and effects of various environmental issues.</li> <li>• Get acquainted with environmental ethics from Indian perspective.</li> </ul>
	Environmental Engineering-I (Water)	<ul style="list-style-type: none"> <li>• Understand the demand of water for various purposes.</li> <li>• Understand various steps involved in water treatment.</li> </ul>
	DSC-C5 – Environmental Impact Assessment	<ul style="list-style-type: none"> <li>• Understand the need and objectives of EIA.</li> <li>• Understand the impacts of various developmental activities on environment.</li> </ul>
	DSC-C6– Environmental Biotechnology	<ul style="list-style-type: none"> <li>• Understand the need and importance of biofuels, biopesticides and vermicomposting.</li> <li>• Inculcation of biotechnology approaches to solve environmental problems.</li> </ul>

<b>Class</b>	<b>Course Code / Course Name</b>	<b>Course Outcome</b>
<b>B.Sc. (Environment Science) II- Sem IV CBCS</b>	DSC-D1 – Environmental Microbiology	<ul style="list-style-type: none"> <li>• Understand the basic concepts and scope of environmental microbiology.</li> <li>• Study the mechanism of various waterborne and airborne diseases.</li> </ul>
	DSC-D2 – Environmental Management System and Audit	<ul style="list-style-type: none"> <li>• Understand the scope, objectives and need of environmental auditing.</li> <li>• Understand the importance of Environment Management System.</li> </ul>
	DSC-D3 – Environmental Engineering (Waste water)	<ul style="list-style-type: none"> <li>• Study the characteristics and constituents in waste water.</li> <li>• Understanding primary, secondary and tertiary treatments to be provided to waste water.</li> </ul>
	DSC-D4 – Environmental Education and Policy	<ul style="list-style-type: none"> <li>• Study the background, need, objectives and status of environmental education.</li> <li>• Get acquainted with various environmental laws in India.</li> </ul>
	DSC-D5– Environmental Economics	<ul style="list-style-type: none"> <li>• Study the need of economics for environment management.</li> <li>• Study the environmental valuation and techniques of biodiversity valuation.</li> </ul>
	DSC-D6 – Disaster Management (man made)	<ul style="list-style-type: none"> <li>• 1. Understand causes and mitigation measures of man-made disasters.</li> <li>• 2. Understand various measures of disaster preparedness and disaster management in India.</li> </ul>

<b>Class</b>	<b>Course Code / Course Name</b>	<b>Course Outcome</b>
<b>B.Sc. (Environment Science) III: Semester V CBCS</b>	DSC-E1: Land and water management- I	<ul style="list-style-type: none"> <li>To study the concept of water balance and types of irrigation systems.</li> <li>Understand about distribution and use of water and land resources</li> </ul>
	DSC-E1: Land and water management- II	<ul style="list-style-type: none"> <li>Understand various anthropogenic reasons responsible for land degradation.</li> <li>To study various watershed management measures.</li> </ul>
	DSC-E2: Wildlife Management- I	<ul style="list-style-type: none"> <li>To study population census techniques of wildlife.</li> <li>Study of human-wildlife conflict and measures to avoid it.</li> </ul>
	DSC-E2: Wildlife Management- II	<ul style="list-style-type: none"> <li>To study need and measures of wildlife conservation.</li> <li>To study various conservation measures undertaken by government organisations and NGO.</li> </ul>

<b>Class</b>	<b>Course Code / Course Name</b>	<b>Course Outcome</b>
<b>B.Sc. (Environment Science) III- Sem VI CBCS</b>	DSC-F1: Environmental Toxicology- I	<ul style="list-style-type: none"> <li>To study types of toxic substances and their effects.</li> <li>To study methods useful for analysis of toxicants.</li> </ul>
	DSC-F1: Environmental Toxicology- II	<ul style="list-style-type: none"> <li>To study various organ specific toxicities.</li> <li>To study negative impacts of pesticides and xenobiotics.</li> </ul>
	DSC-F2: Eco-restoration-I	<ul style="list-style-type: none"> <li>To study concept and need of eco-restoration.</li> <li>To understand about sustainable use of resources.</li> </ul>
	DSC-F2: Eco-restoration-II	<ul style="list-style-type: none"> <li>To study role of government, NGO's and media in eco-restoration.</li> <li>Understand the role of social institutions in eco-restoration.</li> </ul>