



RAICHUR UNIVERSITY, RAICHUR

**Under Graduate Curriculum for Degree of
B.A/B.Sc/B.Com/BCA/BBA**

ENVIRONMENTAL STUDIES

(I & II Semester)

**As per Revised NEP 2024
With Effect from the Academic year from
2024-25 and onwards**

UNIVERSITY GRANTS COMMISSIONS

ENVIRONMENTAL STUDIES

COMPULSORY COURSE/ CONSTITUTIONAL VALUES

This module consists of **4 units**, covering **48 lecture** hours which are **classroom based** and **field work** intended to create awareness, enhance knowledge, develop skills and attitudes necessary to understand the Environment in its totality and enables students to participate proactively for the cause of the environment.

1. Environmental Studies is made compulsory core module syllabus framed by UGC for all the Indian Universities/Colleges as per the directions given by the Honourable Supreme Court, which believed that, conservation of environment should be a national way of life and to be included into the education process. As per Raichur University regulations, State Educational Policy and members of Board of Studies it is proposed to implement the details listed in the tabular column below, **mandatorily**.

Subject	ENVIRONMENTAL STUDIES (COMPULSORY COURSE/ CONSTITUTIONAL VALUES)	Semester
Course	BSC./ BCA./ BBM./ BBA./ Defence strategies (Military Science)	I
	BA./ B.Com./ BFA./ BSW./ BVA	II

2. This pattern helps in distributing the workload of teachers of Environmental Studies to both **I and II semesters** enabling the distribution of the **teaching workload of an institution for full academic year**; ensures distribution of examinations into two semesters; also provide scope for a full-time teacher of the subject.
3. **Eligibility to teach Environmental Studies:** A candidate with minimum qualifications of M.Sc. in Environmental Science subject only is eligible to teach Environmental Studies at the under graduate level in all Autonomous, Government, Aided and Private Colleges which are affiliated to Raichur University. **Preference may be given to candidates with UGC-NET/K-SET/Ph.D. in Environmental Science**
4. However, when such candidate is not available, teachers of the subjects listed below are to be preferred to teach ONLY ENVIRONMENTAL STUDIES paper in the following order:
 - **Biological Sciences:** Botany/Zoology/Microbiology/Biotechnology/Life Sciences
 - **Chemical Sciences and Earth Sciences:** Chemistry/Geology/Earth Sciences

University Grants Commissions
ENVIRONMENTAL STUDIES
(COMPULSORY COURSE/ CONSTITUTIONAL VALUES)

Content of AECC – Environmental Studies	
Unit1:	<p>Environmental Studies: Introduction, Scope and importance; Concept of sustainability.</p> <p>Ecosystem: Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems:</p> <ol style="list-style-type: none"> a) Forest ecosystem, b) Grassland ecosystem, c) Desert ecosystem, d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) <p>Ecosystem and biodiversity services: Ecological, economic, social, aesthetic and informational value.</p>
Unit2:	<p>Natural Resources: Land resources and land-use change; Land degradation, Soil erosion, and desertification.</p> <p>Deforestation: Causes and impacts mainly due to Mining and Dam construction.</p> <p>Water: Use and over-exploitation of surface and ground water, conflicts over water (International and Inter-state).</p> <p>Energy resources: Renewable energy sources- Solar, Wind, Geothermal, Hydropower. Non-renewable energy sources- Coal, Petroleum, Natural Gas and Nuclear energy. Use of alternate energy sources.</p> <p>Biodiversity and Conservation: Levels of biological diversity: Genetic, species and ecosystem diversity. Biogeographic zones of India, Biodiversity Hot spots, Mega-biodiversity of India, Endangered and Endemic species of India. In-situ and Ex-situ conservation of biodiversity.</p> <p>Threats to biodiversity: Habitat loss, Poaching of wildlife and Biological invasions.</p>
Unit3:	<p>Environmental Pollution and Policies:</p> <p>Environmental pollution: types, causes, effects and control; Air, water, soil, noise, light and radioactive pollution. Global warming and climate change, Ozone layer depletion, Acid rain. Nuclear hazards and human health risks. Solid waste management. Control measures of urban and industrial waste. Pollution case studies.</p> <p>Environmental Policies: Environment Protection Act; Air Prevention and Control of Pollution) Act; Water (Prevention and</p>

	control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
Unit4:	<p>Human Communities and the Environment: Human population and its impacts on environment, human health and welfare, hazards of Tobacco- smoked and Smokeless products like Cigar and Gutka, resettlement and rehabilitation.</p> <p>Disaster management: floods, earthquakes, cyclones, landslides and forest fires.</p> <p>Environmental movements: Chipko movement, Ladakh's climatic movement and Climate action strike in India.</p> <p>Environmental ethics: Role of humans in environmental conservation, Importance of CNG in sustainable transportation.</p> <p>Field work</p>

Reference

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