

Deccan Education Society's

Kirti M. Doongursee College of Arts, Science and Commerce (AUTONOMOUS)



Affiliated to

UNIVERSITY OF MUMBAI

Syllabus for

Program: Bachelor of Commerce

Course: First year AEC.

Subject:

ENVIRONMENTAL STUDIES
NEP 2020

Choice Based Credit System (CBCS)

with effect from

Academic Year 2025-2026

PROGRAM OUTCOMES

PO	Description
A student completing bachelor's degree will be able to	
PO1	Disciplinary Knowledge: Capability of executing comprehensive knowledge and understanding of one or more discipline that form part of commerce.
PO2	Communication Skills: Ability to communicate long standing unsolved problems in commerce; Ability to show the importance of commerce as precursor to various market developments since the beginning of the civilization.
PO3	Critical Thinking: Ability to engage in reflective and independent thinking by understanding the concepts in every area of Commerce and Business; Ability to examine the results and apply them to various problems appearing in different branches of Commerce and Business.
PO4	Problem solving: Capability to deduce a business problem and apply the classroom learning into practice to offer a solution for the same. Capabilities to analyze and synthesize data and derive inferences for valid conclusion.
PO5	Research Related Skills: Ability to search for, locate, extract, organize, evaluate, and use or present information that is relevant to a particular topic
PO6	Self-directed Learning: Capability to work independently in diverse projects and ensure detailed study of various facets of Commerce and Business.
PO7	Moral and Ethical Awareness/Reasoning: Ability to ascertain unethical behavior, falsification, and manipulation of information. Ability to manage self and various social systems.
PO8	Lifelong learning: Capability of self-paced and self-directed learning aimed at personal development and for improving knowledge/skill development and reskilling in all areas of Commerce

Course Code	SEM – I - Course Title	Credits	Lectures/Week
23EVSVC181	FUNDAMENTAL OF ENVIRONMENTAL STUDIES	2	2
Course Outcomes: • CO1:Remember Learners will be able to recall key concepts of the environment, ecosystem, food chain, food web, ecological pyramids, resource classification and conservation, urbanization, population explosion, environmental degradation, and the concept of smart, safe, and sustainable cities. • CO2: Understand Learners will be able to explain the meaning, scope, and components of the environment, describe the structure and functioning of ecosystems, interpret the relationships in food chains, food webs, and ecological pyramids, and analyze the significance of resource conservation, sustainable development, urbanization challenges, population growth effects, and environmental degradation, including the concept of smart and sustainable cities. • CO3: Apply Learners will be able to apply the concepts of ecosystems, food chains, food webs, and ecological pyramids to analyze environmental interactions, utilize resource conservation techniques in practical scenarios, propose solutions for urbanization challenges and population growth effects, and recommend strategies for developing smart, safe, and sustainable cities. • CO4: Analyze Learners will be able to examine the interrelationships between environmental components, evaluate the functioning of ecosystems, analyze the impact of urbanization, population growth, and resource utilization on environmental degradation, and differentiate sustainable urban development strategies for creating smart and safe cities.			
Unit	Topics	No of Lectures	
I	Environment, Ecosystem and Natural Resources • Environment: Meaning, definition, scope. • Ecosystem: Definition, components, and types, functioning and Structure of Ecosystem. • Food Chain and Food Web- Ecological Pyramids • Definitions and Classification of resources. • Factors influencing resource utilization and Methods of Resource conservation.	15	
II	Urbanization and Environment • Concept of Urbanization.	15	

	• Problems of migration and urban environment-changing land use, crowding and stress on urban resources. • Problems associated with Population Explosion and its effects - Measures taken to control population growth in India. • Degradation of air and water, loss of soil cover impact on biodiversity, Urban heat islands. • Case study of Emerging Smart Cities and safe cities Sustainable Cities in India.	
References: 1. Dr. Pushpendra, Basics in Environmental Studies 2. Swapan Deb, Environmental Management. 3. Ministry of Urban Development official Website for Smart Cities 4. Ward, Hugh eds, The Sage Handbook of Environment and Society 5. Sundar I, Environment and Sustainable Development. 6. Majid Hussain, Human Geography. 7. World Development Report- Annual 8. Census of India, 2011 9. Pandey, B ed, Natural Resource Management 10. Sarsby, R. eds, The Exploitation of Natural Resources and the Consequences. 11. Knight. et. al. eds, A New Century for Natural Resources Management. 12. Bagad Anjali, Environmental Studies. 13. Beuren, Allan et. Al, Sustainable Urban Environments: An Ecosystem Approach. 14. Ward, Hugh eds, The Sage Handbook of Environment and Society.		

SEM 1 FUNDAMENTAL OF ENVIRONMENTAL STUDIES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1: Remember	2	1	2	2	2	1	1	2
CO2: Understand	3	2	3	2	3	2	2	2
CO3: Apply	2	2	2	3	2	2	1	2
CO4: Analyze	2	2	3	2	2	3	2	2

Course Code	SEM-II - Course Title	Credits	Lectures /Week
23EVSVE281	FUNDAMENTAL OF ENVIRONMENTAL STUDIES	2	2
Course Outcomes: • CO1:Remember Learners will be able to recall key concepts of solid waste classification, sources, and effects, waste management initiatives, roles of citizens, CSR, and NGOs, as well as ISO standards, Carbon Credit, EIA, and ecological footprint. They will also remember environmental issues in agriculture and industries, sustainable practices, Environment Protection Acts, and the importance of SDGs. • CO2: Understand Learners will be able to explain the effects of solid waste pollution, waste management schemes, roles of citizens, and the contributions of CSR and NGOs. They will also understand concepts like ISO standards, Carbon Credit, EIA, STDs, ecological footprint, and the environmental issues related to agriculture, industries, and SDGs. • CO3: Apply Learners will be able to apply waste management practices, sustainable agricultural and industrial strategies, and CSR/NGO initiatives. They will also implement concepts like ISO standards, Carbon Credit, EIA, and ecological footprint to address environmental issues and support SDGs. • CO4: Analyze Learners will be able to analyze waste management effectiveness, environmental impacts of pollution, and the role of sustainable practices in agriculture and industry. They will evaluate the contributions of CSR, NGOs, and regulations, and assess the application of ISO standards, Carbon Credit, EIA, and ecological footprint.			
	Topics	No of Lectures	
I	Solid Waste and Environmental Management for Sustainable Society • Classification of solid wastes —Sources of Solid Waste. • Effects of Solid Waste Pollution: Health hazards, Environmental impacts. • Waste management Schemes and initiatives in India, Role of citizens in Waste Management in Urban and Rural areas. • Concept of Environmental Management, ISO, EIA, STDs in Environmental Management and the concept of Carbon Bank and Carbon Credit, ecological footprint. • Role and functions of Corporate Social Responsibility and NGOs towards environmental Management.	15	
II	Agriculture, Industrial Development and Sustainable development	15	

	• Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation, desertification uneven Food Production — Hunger, Malnutrition. • Food security Act, Sustainable Agriculture practices. • Environmental Problems Associated with Industries: Sustainable Industrial practices — Green Business and Green Consumerism. • Concept of Environment Protection Acts and Modern methods of study Environment. • Concept of Sustainable development, and importance of SDG's	
References: 1. Dr. Pushpendra, Basics in Environmental Studies 2. Swapan Deb, Environmental Management. 3. Ministry of Urban Development official Website for Smart Cities 4. Ward, Hugh eds, The Sage Handbook of Environment and Society 5. Sundar I, Environment and Sustainable Development. 6. Majid Hussain, Human Geography. 7. World Development Report- Annual 8. Census of India, 2011 9. Pandey, B ed, Natural Resource Management 10. Sarsby, R. eds, The Exploitation of Natural Resources and the Consequences. 11. Knight. et. al. eds, A New Century for Natural Resources Management. 12. Bagad Anjali, Environmental Studies. 13. Beuren, Allan et. Al, Sustainable Urban Environments: An Ecosystem Approach.		

SEM II FUNDAMENTAL OF ENVIRONMENTAL STUDIES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1: Remember	2	1	3	2	2	1	1	2
CO2: Understand	2	2	2	2	2	2	2	2
CO3: Apply	2	2	2	2	2	2	1	2
CO4: Analyze	3	2	2	3	2	2	2	2

Evaluation Scheme for First Year (UG) under NEP (2 credits)

I. External Examination for Theory Courses – 50 Marks

Duration: 2 Hours

Multiple Choice Questions (50) Questions

All questions are compulsory.

Question	Based on	Marks
Q.1	Unit I	25
Q.2	Unit II	25

**NOTE: To pass the examination, attendance is compulsory in both
Internal & External (Theory + Practical) Examinations**