COURSE CONTENT: Environmental Issues in Real Estate
Course Code and Title: ENV-101, Environmental Issues in Real Estate
Credit: 3 Credit Hours
CIE Marks: 60
SEE Marks: 40

RATIONALE OF THE COURSE

The course "Environmental Issues in Real Estate" is designed to provide a comprehensive understanding of the intersection between real estate development, land use, and environmental considerations. As the global community increasingly recognizes the significance of environmental sustainability, real estate professionals must be equipped with the knowledge and skills to navigate the complex landscape of environmental issues in the real estate industry.

CONTENT OF THE COURSE

SL. NO.	COURSE CONTENT (As Summary)	Hrs.	CLOs
1	**Terminologies related to the environment:** Environment and its components, Carrying Capacity, Renewable and Non-renewable resources, Ecological footprint, Carbon footprint, Public Goods, Common Pool Resources, Sustainable Development	3	
2	**Water Supply System:** Urban Water supply system, Factors considered for planning water supply system, World trends in water demand, Factors influencing per capita water demand, Fluctuation in the rate of demand, Design period of the water supply system, Water source, Groundwater, Surface water, Rain water harvesting (components, positive and negative aspects), Water quality, Water treatment method (Coagulation and flocculation, Sedimentation, Filtration, Disinfection), Water distribution system (Gravity, pumping, and combined system)	9	
3	**Sewerage System:** Basic terminologies (Sewage, Sludge, Sullage, Storm Water, Sewer, Sewerage System), Components of a sewerage system, Types of collection system, Separate sewer system, Combined sewer system, Partially separate/ Partially combined sewer system, Sewage treatment method	3	
4	**Sanitation System:** Concept of sanitation, Definition of hygienic latrine, On-site sanitation system: Pit system & Septic tank system, Types of pit latrine (direct pit, partially offset, offset), Pour flush sanitation (direct pit, offset single pit, offset twin pit), Groundwater pollution from pit and pour-flush latrine, Advantages and disadvantages of different sanitation system, Process in septic tank, Fecal sludge management (collection, transportation, treatment, and disposal), Off-site sanitation system/ Sewerage system	9	

5	**Solid Waste Management:** Hierarchy of waste management (Reduce, reuse, recycle, recover, disposal), Solid waste collection and storage methods, Transportation, Recovery, Ultimate disposal, Sanitary landfill and its environmental impacts, Planning and siting of landfill, Landfill leachate and gas management.	9	
6	**Standards of Eco-Planning** Bio-tope area factor in Berlin, Green space factor in Malmo, Green factor in Seattle, Green infrastructure score of North West England,	6	
7	**Green Building and Eco-friendly Construction:** Renewable energy sources, Energy efficient heating, ventilation, and lighting systems, Water conservation technologies, Green roofs and walls, Concept of 3R, Recycled and sustainable material, Real estate construction waste management, Green certification standards	6	

ASSESSMENT PATTERN
CIE – Breakup [60 marks]

Bloom's Criteria	Attendance (07)	Class Test (15)	Assignment (05)	Presentation (08)	Mid Exam (25)
Remember	07				
Understand		05		02	05
Apply		05	02	03	10
Analyze		03	03		10
Evaluate		02			
Create				03	

SEE – Semester End Examination [40 marks]

Bloom Criteria	Score for the Test
Remember	05
Understand	05
Apply	10
Analyze	10

Evaluate	05
Create	05

1.