

LESSON PLAN

Program Name	Architecture Assistantship
Subject Name	Building Services
Subject Code	ARBSAE - 3003
Semester	THIRD
Subject Co-ordinator Name	Miss Monika

Evaluation Scheme

Subject Name	Study Scheme (Hrs/Week)		Marks in Evaluation Scheme						Grand Total
			Internal Assessment			External Assessment			
	Th	Pr	Th	Pr	Total	Th	Pr	Total	
Building Services	3	-	40	-	40	60	-	60	100
Text / Reference Books	(i) "Water Supply Engineering", Dr. B.C. Punmia, Ashok Kumar Jain and Arun Kumar Jain, Laxmi, 2003 (ii) Wastewater Engineering", Dr. B.C. Punmia, Ashok Kumar Jain and Arun Kumar Jain, Laxmi, 1998" (iii) Basic of Electrical and Electronics by S.K. Bhattacharya.								

Course Outcomes (COs)

CO - 1	To explain the concept of water treatment, discuss the methodology of storing and distribution of water, calculate water demand and draw a layout plan of water supply for multi storey buildings.
CO - 2	To express the application, specifications and functionality of various fixtures used in the system, discuss the methodology of water harvesting and draw a layout plan of drainage, wastewater and stormwater for a residence.
CO - 3	To describe thermal, mechanical & electrical energy, discuss electrical distribution systems, safety devices, electric fixtures and draw electrical layout for a residence.
CO - 4	To express various types of artificial lighting, fires, types of fire fighting devices and explain various causes of fire.

Monika

J.L. S.

Teaching Plan

Unit No.	Name of Topic	Proposed Date	Actual Date	Remarks
1	Various Sources and Treatment of water.	01-08-2024		
	Water demand & calculations, Storage & conveyance of water at municipal level.	02-08-2024, 06-08-2024		
	Water supply systems and various fittings.	08-08-2024, 09-08-2024		
	Hot and Cold-water supply layouts.	13-08-2024, 16-08-2024		
	Water supply design of a residence: Connection with water mains, design of Underground & Overhead water tanks, pump capacity, calculations for diameter of pipe.	22-08-2024, 23-08-2024, 29-08-2024, 30-08-2024		
	Design of water supply in a multi-storied building.	03-09-2024, 05-09-2024, 06-09-2024		
2	Definition of Refuse, garbage, rubbish, sullage, sub soil water, storm water etc.	12-09-2024, 13-09-2024		
	Various drainage & sanitary fixtures & fittings, traps - role of water seal, sizes, materials and their space requirements.	17-09-2024, 19-09-2024, 20-09-2024		
	Types of pipes and drains in different materials and their usage, diameter of pipes, slope standards.	24-09-2024, 26-09-2024, 27-09-2024		
	Inspection and Intercepting chambers, manholes etc.	01-10-2024, 03-10-2024		
	Sewage and Effluent treatment- Innovative and cost-effective sanitation concepts	04-10-2024, 08-10-2024		
	Introduction to STP's & ETP's, Design calculations of septic tank & soak pit	10-10-2024		

Mouliha

Jim

	Stormwater design calculations for roof top & for surface drains, Rainwater Harvesting & Groundwater Recharge	18-10-2024, 22-10-2024		
	Exercise: Design a layout for a residence for water supply, drainage, sewage and storm water.	24-10-2024		
3	Introduction to Thermal, Mechanical & Electrical energy, Electrical distribution systems and safety devices	25-10-2024, 29-10-2024		
	Types of wiring systems, advantages and disadvantages, safety and precautions.	01-11-2024		
	Types of electrical equipment/fixtures used in a building such as motors, fuses, switchboards, MCB's, ELCB's, fuse units, control panels etc.	05-11-2024, 07-11-2024		
	Standard symbols for various fixtures as per National Building Code 2016, Exercise: Preparing an electrical layout with all necessary details for a small building/residence	08-11-2024, 19-11-2024		
4	Introduction to Illumination, studies of the same such as various types of artificial lighting.	21-11-2024		
	Various Terms in lighting, standards of illumination for illumination levels, Types of artificial lighting sources, types of luminaires & fixtures, Types of fire and its causes	22-11-2024 26-11-2024,		
	Firefighting devices (Sprinkler system, Wet riser system, Fire Extinguishers, Fire alarm, Smoke detectors, various types of fire hydrants, Fire escape modes.	28-11-2024, 29-11-2024		

Abhinava

fil


Pin

Assignments

Assignment No.	Contents of Syllabus Covered	Proposed Date	Actual Date	Remarks
A - 1	(i) Water supply systems and various fittings. (ii) Water supply design of a residence, (iii) Design of water supply in a multi-storied building.	03-09-2024		
A - 2	(i) Standard symbols for various fixtures as per National Building Code 2016, (ii) Exercise: Preparing an electrical layout with all necessary details for a small building/residence	08-10-2024		
A - 3	(i) Types of artificial lighting sources, types of luminaires & fixtures, (ii) Fire alarm, Smoke detectors, various types of fire hydrants, Fire escape modes.	05-11-2024		

House Test / Class Test

Name of Test	Syllabus for Tests	Proposed Date	Actual Date	Remarks
Class Test - 1	Water Supply	10-09-2024		
Class Test - 2	Wastewater and Solid Waste management	15-10-2024		
House Test -1	(i) Water Supply (ii) Wastewater and Solid Waste management (iii) Electrical services	As per Scheduled Date		


(Signature of Teacher)


(Signature of Principal)


(Signature of HOD)