

## LESSON PLAN

NAME OF THE FACULTY :  
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP  
 SEMESTER : 3<sup>rd</sup>  
 SUBJECT : CLIMATOLOGY  
 DURATION : 15 WEEKS  
 WORK LOAD PER WEEK : 03

WEEK	LECTURE DAY	THEORY
		TOPIC
1 <sup>ST</sup>	1.	<b>General Introduction</b>
	2.	Introduction to climatology
	3.	Movement of earth around sun,
2 <sup>ND</sup>	4.	Elements of climate (Wind, temp, humidity, precipitation, pressure).
	5.	Different Climatic Zones.
	6.	Orientation of building with respect to above mentioned elements of climate
3 <sup>RD</sup>	7.	Effect of climate on man and shelter.
	8.	<b>Relation of Climate and comfort</b>
	9.	Difference between Climate and comfort
4 <sup>TH</sup>	10.	Macro-micro climatic effects
	11.	Difference between Macro-micro climatic effects
	12.	Concept of comfort zone
5 <sup>TH</sup>	13.	Concept of bio-climatic chart
	14.	Relation of comfort zone and bio-climatic chart
	15.	<b>SESSIONAL TEST- 1st</b>
6 <sup>TH</sup>	16.	Climatic evaluation by season
	17.	<b>Sun Control and shading devices (without calculations)</b>
	18.	Solar Chart (sun path diagram)

7TH	19.	Orientation for sun
	20.	Internal and external sun protection devices
	21.	Natural lighting
8TH	22.	Introduction of Solar Passive Design
	23.	Objectives of Solar Passive Design
	24.	Passive solar heating and cooling
9TH	25.	<b>Wind control</b>
	26.	Orientation with respect to wind
	27.	Wind protection devices
10TH	28.	<b>Use of building materials with respect to climate:</b> Concrete, Brick, Glass
	29.	Use of building materials with respect to climate: Plastics, Stone, Insulating material
	30.	<b>SESSIONAL TEST- 2nd</b>
11TH	31.	<b>Criteria for site selection</b>
	32.	<b>Environment and Ecology</b>
	33.	Basic elements of ecology
12TH	34.	Concepts of natural cycles in Eco-system

	35.	Source of noise and air pollution
	36.	Noise and air pollution effects
13T H	37.	Noise and air pollution controls
	38.	Use of landscape elements
	39.	Use of landscape elements for micro and macro climate control
14T H	40.	Relation of micro and macro climate control
	41.	Introduction to climate change
	42.	Principle causes of climate change
15T H	43.	Climate change: effects- methods of mitigating climate change
	44.	Climate change: effects- methods of mitigating climate change
	45.	<b>SESSIONAL TEST- 3rd</b>