

DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

COURSE PLAN – PART I			
Course Title	ENVIRONMENTAL LIGHTING		
Course Code	AR 715	No. of Credits	02
Course Code of Pre-requisite subject(s)	--	---	
Session	Jan. 2022	Section (if, applicable)	
Name of Faculty	Dr. K. Premkumar	Department	ARCHITECTURE
Email	prem@nitt.edu	Telephone No.	0431-2503556
Course Type	Elective course		
Syllabus (approved in BoS)			
<ul style="list-style-type: none"> • Lighting Design – Effect of light on user orientation, room comprehension, form, structure and materials. • Impressions of visual clarity, spaciousness, relaxation, privacy etc. Interior lighting design requirements for offices, factories, commercial interiors, museums and galleries, etc. • Exterior lighting: Functional requirements, buildings and facades, pedestrian routes and surrounding areas, parking areas and landscape lighting. • Emergency lighting: Escape lighting, shutdown lighting and standby lighting, equipment and system design. Integration of daylight and artificial lighting. Economics of supplementary lighting. • Cost-effective day lighting design, energy efficiency and maintenance • Lighting cost, performance of lamps and luminaries. Estimating energy use. Energy saving developments. 			
COURSE OBJECTIVES			
<ol style="list-style-type: none"> 1. To enable the students to understand the significance of environmental lighting on visual, functional and psychological aspects of design . 2. To acquire knowledge about interior and exterior lighting design and details through case studies and assignments. 			

3. To develop sustainable strategies for lighting based on the studies that could be applied in various context of design.	
COURSE OUTCOMES (CO)	Aligned Programme Outcomes (PO)
1. To understand the importance of environmental lighting in the realm of sustainable design	To emphasis the significance of environmental lighting for sustainable design in local context.
2. Capacity building in addressing cost effective lighting design issues while ensuring sustainability	To get integrated with sustainable design exercise.
3. To motivate for contextual research in environmental lighting design with reference to sustainability.	To lay foundation for establishment of environmental lighting laboratory in future.

COURSE PLAN – PART II			
COURSE OVERVIEW			
Creating awareness about the importance of visual language for general design learning in particular Architectural Design.			
COURSE TEACHING AND LEARNING ACTIVITIES			
S.No.	Week	Topic	Mode of Delivery
1	1 st - 4 th	Basics on Lighting Design – Effect of light on user orientation, room comprehension, form, structure and materials	Classroom inputs, discussion, seminar presentation, assignments observation of lighting in everyday settings.
2	5 th - 8 th	Impressions of visual clarity, spaciousness, relaxation, privacy etc. Interior lighting design requirements for offices, factories, commercial interiors, museums and galleries, etc.	Classroom inputs, discussion, seminar presentation, assignments observation of lighting in everyday settings
3	9 th - 12 th	Exterior lighting: Functional requirements, buildings and facades, pedestrian routes and surrounding areas, parking areas and landscape lighting.	Classroom inputs, discussion, seminar presentation, assignments observation of lighting in everyday settings

4.	13 th – 16 th	<p>Emergency lighting: Escape lighting, shutdown lighting and standby lighting, equipment and system design.</p> <p>Integration of daylight and artificial lighting. Economics of supplementary lighting.</p> <ul style="list-style-type: none"> • Cost-effective day lighting design, energy efficiency and maintenance • Lighting cost, performance of lamps and luminaries. Estimating energy use. Energy saving developments. 	Classroom inputs, discussion, seminar presentation, assignments observation of lighting in everyday settings
Total number of assignments to be given in this semester			4 sets.

COURSE ASSESSMENT METHODS (shall range from 4 to 6)

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage	
				Internal Marks	External Marks
1	Test -1	6 th week	1 hour	20	-
2	test -2	14 th week	1 hour	20	-
3.	2 sets of assignment	Before test1	--	5+10 = 15	-
4.	2 sets of assignment	After Test 1	--	5+10=15	-
5.	One compensatory assessment	As per the academic schedule	1 hour	20	-
	Total internal assessment			IA= 70marks	-
6..	End semester exam * Final assessment - FA * As per RASP	After test 2 End of 16 th week	2 hours	-	FA =30marks
	IA + FA = 70+30 = 100			Total marks=100	

COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)

At the end of the semester, a feedback will be obtained from the students with the point scale feedback system for further improvement.

COURSE POLICY (preferred mode of correspondence with students, policy on attendance, compensation assessment, academic honesty and plagiarism etc.)

1. The schedule for submission of the assignment should be followed strictly, delayed submission is not accepted.
2. Overall Attendance should not be less than 75%.
3. Whenever the filed study and video classes are conducted 100% attendance is mandatory. (The absence may be with valid reasons with evidence)
4. One * Re-test will be conducted for those who miss one of their cycle tests.
5. Overall 40% marks are required for passing.
6. All the seminar presentation should be attended without fail.
7. plagiarism will be viewed seriously and treated as per institute norms .

ADDITIONAL INFORMATION

eg.: The Course Coordinator is available for consultation at times that is displayed on the coordinator's office notice board. Queries may also be emailed to the Course Coordinator directly at prem@nitt.edu.

FOR APPROVAL


Course Faculty _____
Dr.K.Premkumar
08.02.2022


Wilson. F
CC-Chairperson _____


HOD _____
Dr.K.Thirumaran