



Department of Architecture

Course: 10210207 Architectural Design Studio- Envelope design
Instructors: Dr. S. Ramesh, K.Naga Viswatej

Class: M.Arch II Sem A.Y. 2017-18
 Internal Assessment: 150
 External Theory Exam: 150
 Total Marks: 300
Credits: 9

Contact Periods/ week: 06 periods

Time Table:

Attendance: Min 75%

Min. Passing Marks: 40% each in Internal & External Assessment, 50% in Aggregate

Objective:

To learn and hone architectural design skills and required to incorporate the knowledge gained from theory courses into the design solutions. Typically, at the end of the Design Studio, each student is required to explain the key concepts and integrated design philosophy with the supporting program with computational tools and physical models.

LECTURE PLAN

S. No.	Week	TOPIC OF CLASS LECTURE & DISCUSSION	CLASS ACTIVITIES & ASSIGNMENTS
1	Week 1	Minor design Problem: Introduction to the topic, objectives of the studio and scope of the work, Discussion on nature of task, description, understanding of design principles with respect to the problem and Data Collection.	Lecture sessions, Studio discussion and reference study from Library, computer simulation tutorial - 1
2	Week 2	Site analysis - SWOT, context, Climatic and topography, site model, Concept evolution, Schematic site plan and massing model submission	Review session
3	Week 3	Detailed drawings and shadow analysis	Review and group discussion
4	Week 4	Submission of minor problem design and Report	<u>Stage-1 Assessment</u>
5	Week 5	Major design Problem: Introduction to the topic, objectives of the studio and scope of the work	Case study - Study tour
6	Week 6	Major design Problem: Discussion on nature of task, description, understanding of design principles with respect to the problem and Data Collection.	Lecture Session and Group discussion
7	Week 7	Literature support, Site analysis, site model, Concept evolution and massing model submission options.	
8	Week 8	Scheme Floor plans and sections	
9	Week 9	Scheme Floor plans and sections - scheme 3d views	
			Stage-2a Assessment - Introduction; Time Problem - Introduction to the topic,

10	Week 10	sections details and additional envelope details	objectives of the work and scope of the work, Discussion on nature of task, description, understanding of design principles with respect to the problem and Data Collection
11	Week 11	Time Problem submission	<u>Stage-2a Assessment</u>
12	Week 12	Site plan and landscape details	Review
14	Week 13	Pre final review 1, Literature report	Literature submission
13	Week 14	Pre final review 2 - details of openings and wall section details	Stage-3 Assessment
15	Week 15	Final model Submission	<u>Stage 3 b Assessment (Physical Model Submission)</u>
16	Week 16		

S.No.	Category of Evaluation	Marks	Note
1	Assessment – 1	25	<i>The Marks allotted at each stage is tentative. Categories of evaluation may be increased or decreased (merged) on need-basis</i>
2	Assessment –2a	25	
3	Assessment –2b	50	
4	Assessment –3a	30	
5	Assessment –3b	70	

Portfolio: Revisions and Compilation of Drawings submitted and evaluated from time to time.

References:

Bansal Narendra, K., Hauser Gerd and Minke Gernot, "Passive Buildings Design: A Hand book of Natural Climatic Control", Elsevier Science, Watson Donald, "Climate Design: Energy Efficient Building principles and practices", McGraw Hill Book Company, New York, 1983. Stoecker, W.F., "Refrigeration and Air Conditioning", Tata McGraw Hill, New Delhi. Morgan, T., & Clifford, "Introduction to Psychology", Tata McGraw - Hill Publications New York, 1983.

Watson Donald, "Climate Design: Energy Efficient Building principles and practices", McGraw Hill Book Company, New York, 1983. Abrams, D.W., "Low Energy Cooling: A Guide to the practical Application Benjamin Evans, "Daylight in Architecture", McGraw Hill Book Co., New York, 1981

MEBC Schiler, "Simplified Design of Building Lighting", John Wiley & Sons, Inc., New York, 1992

Michael Nigginton & Jude Harris, "Intelligent skins" Architectural Press, Oxford, 2002.

Mackenzie Dorothy, "Green design: design for the Environment", Laurence King, London, 1997.