DESIGN THEORY I
ENAR 204

Lecture : 3   Year : II
Tutorial : 1   Part : I
Practical : 0

Course Objectives:

This course introduces students to foundational architectural theories, including classical and modern principles, social and cultural influences, and the importance of place, context, and design thinking. The objectives are to familiarize students with key components of architectural theory, develop their ability to analyze social, cultural, and contextual influences in design, and equip them with skills to apply design thinking and problem-solving techniques to architectural projects.

1   Introduction to Architectural Theory   (5 hours)

1.1   Definition of theory
1.2   Architectural theory (Empiricist and rationalist approach)
1.3   Positive vs normative theory
1.4   Procedural and substantive proposition
1.5   Design theory (Procedural, substantive and problem solving knowledge)

2   Ancient Architectural Treatise   (6 hours)

2.1   Vastu Shastra
2.2   Vitruvius and his ideas
2.3   Firmitas: Durability and strength in design
2.4   Utilitas: Functionality and usability in architecture
2.5   Venustas: Aesthetics and beauty in design

3   Social and Cultural Theory in Architecture   (8 hours)

3.1   Social influence in architecture
3.2   Cultural impact on house form
3.3   Social and cultural movement (Modernism, post modernism)
3.4   Social sustainability in architecture
3.5   Case studies on social and cultural influence

4   Form, Function and Context   **(8 hours)**

    4.1   Place and context in architecture
    4.2   Building tasks (Physical control, functional frame, social milieu, and cultural symbolism)
    4.3   Formal structure and style: Mass, space, surface, and relations
    4.4   Technic: Massive and skeletal systems
    4.5   Case studies integrating form, function, and context

5   Anthropological Concepts of Space   **(8 hours)**

    5.1   Proxemics: Personal space zones and cultural differences
    5.2   Territoriality in architectural design
    5.3   Lefebvre's triad: Conceived, perceived, lived spaces
    5.4   Embodied, sacred, profane and public spaces
    5.5   Application of anthropological concepts in architecture

6   Design Thinking in Architecture   **(10 hours)**

    6.1   General characteristics of design (Well defined, ill defined, wicked problems)
    6.2   Design thinking process/stages
    6.3   Information processing theory
    6.4   User centric designing models (Tim Brown's IDEO)
    6.5   Heuristic reasoning and design solutions

Tutorial   **(15 hours)**
    1.   Analyze modern buildings using Vitruvian principles
    2.   Site analysis and contextual design exercises
    3.   Creative problem-solving and decision-making in design thinking

Final Exam
The questions will cover all the chapters in the syllabus. The evaluation scheme will be as indicated in the table below:

Chapter	Hours	Marks distribution*
1	5	6
2	6	9
3	8	12
4	8	9
5	8	9
6	10	15
Total	45	60

 * There may be minor deviation in marks distribution.

References

1. Rowe, P. G. (1987). Design Thinking. MIT Press.
2. Norberg-Schulz, C. (1965). Intentions in Architecture. MIT Press.
3. Johnson, P. A. (1994). The Theory of Architecture: Concepts, Themes, and Practices. Van Nostrand Reinhold.
4. Broadbent, G. (1969). Design Methods in Architecture. Wiley.
5. Rapoport, A. (1969). House Form and Culture. Prentice Hall.
6. Billington, R., Strawbridge, S., Greensides, L., & Fitzsimons, A. (1991). Culture and Society: Sociology of Culture. Macmillan Education.
7. Lefebvre, H. (1991). The Production of Space. Blackwell.