

## **AMID-14 FURNITURE DESIGN**

### **Course overview:**

The course provides a framework to analyze and design furniture forms scientifically and sensitizes the students visual perception of furniture as a single form and as a system in a given interior space.

### **Objectives of the course:**

Imparts the knowledge of various styles, systems and products available in the market. Enhances the knowledge of ergonomics, materials, design and working parameters in designing furniture.

Develops systematic design approach and space planning through furniture as elements of design.

### **Expected skills/ knowledge Transferred:**

The course prepares the student for mass production of furniture for various classes of people with the parameters of economy and culture.

### **Course Contents: Unit – I**

Furniture categories, exploration of the idea of furniture, role of furniture in interior design, Design approaches in furniture design.

### **Assignment:**

Measured drawing of a piece of furniture – plan, elevation and drawings on full scale

### **Unit – II**

Brief overview of the evolution of furniture from Ancient to present: Various stylistic transformations. Furniture designers and movements. Analysis of furniture in terms of human values, social conditions, technology and design criteria.

### **Unit - III**

Functional and formal issues in design: study and evaluation of popular dictums such as “Form follows function”, “Form and function are one”, “God is in Details” etc.

Evaluation of visual design: study of Gestalt theory of design – law of enclosure, law of proximity, law of continuity etc.

Human factors, engineering and ergonomic considerations: principles of universal design and their application in furniture design.

#### **Unit – IV**

An introduction of various manufacturing processes most frequently adopted in furniture design such as Injection Molding, investment casting, sheet metal work, die casting, blow- molding, vacuum - forming etc.

#### **Unit – V**

Seating Design: Different types of seating with a focus on the following –

- Functionality
- Aesthetics
- Style
- Human factors and ergonomics

The other component to be considered is the cost of the designed furniture piece.

**Assignment:** Design with wood, metal and combination of materials. Drawings, details and prototype making. Market survey of available products and economics of products.

#### **Unit – VI**

Storage systems: Functional analysis of storage systems and thereby deriving types of cabinets needed for interior spaces – kitchen cabinets, wardrobes closets, book cases, show cases , display systems etc.

**Assignment:** Exercise to design kitchen cabinets for a given kitchen.

#### **Unit –VII**

Modular approach to furniture design – various materials, combination of materials and its application – design parameters, ergonomics etc. Drawings and prototype. Survey of several modular systems available for different functions in the market. Exploration of wood, metal, glass, plastics, FRP as materials for system design. Cost criteria of furniture design.

**Assignments :**

- Typology of furniture with respect to the different states in India.
- Design for middle and lower middle income groups- elements of living units, education institutes, health facilities, street elements etc.

#### **•Reference Books :**

- Joseph Aronson, The Encyclopedia of Furniture: Third Edition ,1961
- Bradley Quinn, Mid-Century Modern: Interiors, Furniture, Design Details, Conran Octopus Interiors, 2006.
- Jim Postell, Furniture Design, Wiley publishers, 2007.
- Edward Lucie-Smith , Furniture: A Concise History (World of Art) , Thames and Hudson, 1985

- Robbie. G. Blakemore, History of Interior Design and Furniture: From Ancient Egypt to Nineteenth-Century Europe, Wiley publishers, 2005.
- John.F. Pile, Interior Design, 2<sup>nd</sup> edition, illustrated, H.N.Abrams, 1995.