

AMID-03 DESIGN DRAWING AND GRAPHICS – I

Course Overview:

The course introduces the fundamental techniques of concept sketches, design development sketches, presentation sketches, presentation renderings and architectural drawing and develops the appropriate skills for visualization and representation.

Objectives of the course:

To introduce representation and design drawing techniques and to facilitate effective visual communication.

Expected Skills / Knowledge Transferred:

Freehand drawing of lines and shape, tone and texture, form and structure, space and depth. Scaled drawing skills for design thinking and conventional design representations in drawings and graphics.

Course Contents:

Unit – I

Introduction to pencil exercises – Knowledge about usage of different points of pencils, handling of pencils, practicing lines and tone building exercises.

Unit – II

Simple exercises of object drawings – natural geometric forms with emphasis on depth and dimension, detail & texture, sunlight & shadow.

Unit – III

Introduction – Fundamentals of drawing and its practice, introduction to drawing equipment, familiarization, use and handling.

Unit – IV

Drawing – Drawing sheet sizes, composition, fixing. Simple exercises in drafting, point and line, line types, line weights, straight and curvilinear lines, dimensioning, lettering, borders, title panels, tracing in pencil, ink, use of tracing cloth. Portfolio preparation.

Unit – V

Architectural symbols – representation of building elements, openings, materials, accessories etc., terminology and abbreviations used in architectural presentation.

Unit- VI

Architectural representation of landscape elements such as trees, indoor plants, planters, hedges, foliage, human figures in different postures, vehicles, street furniture etc.; by using different media and techniques and their integration to presentation drawings.

Unit – VII

Measuring and drawing to scale – scales and construction of scales, simple objects, furniture, rooms, doors and windows etc. in plan , elevation and section etc. reduction and enlargement of drawings.

Unit – VIII

Interiors and furniture sketching – Interior still life, perspectives, lighting & composition, textures and details, material expressions, individual pieces of furniture, elevations & plans etc. using different media. Drawing from photographs.

Unit – IX

Building Geometry – Study of points, lines and planes leading to simple and complex solid geometrical forms. Orthographic projections of points, lines, first angle projections of planes and solids, sections of solids, development of surfaces of solids and intersections of solids. Use of geometry in buildings - isometric, axonometric, and oblique views. Working with models to facilitate visualization.

Note: This is a studio subject and students should be made to prepare construction drawings as studio exercises along with the theoretical inputs. The studio work should be supplemented with appropriate site visits.

REFERENCE BOOKS:

- Stephen Kliment, Architectural Sketching and Rendering: Techniques for Designers and Artists, Watson Guptill, 1984.
- Ivo.D. Drpic, Sketching and Rendering of Interior Space, Watson- Guptill, 1988.
- Maureen Mitton, Interior Design Visual Presentation: A Guide to graphics, models and presentation techniques, 3rd edition, wiley publishers, 2007
- Mogali Delgade Yanes and Ernest Redondo Dominquez, Freehand drawing for Architects and Interior Designers, ww.Norton & co., 2005
- Francis D.Ching, Design Drawing, Wiley publishers Moris,
- I.H.Geometrical Drawing for Art Students.
- Thoms, E.French. Graphics Science and Design, New York: MC Graw Hill.
- Nichols, T.B. and Keep, Norman. Geometry of Construction, 3rd ed. Cleaver – Hume Press Ltd., London, 1959.
- Bhatt, N.D. and Panchal V.M.Engineering Drawing: Plane and Solid Geometry, 42nd ed. Charotar Pub., Anand, 2000.
- Gill, P.S.T.B. of Geometrical Drawing, 3rd ed. Dewan Suhil Kumar kataria, Ludhiana, 1986.

- Shah, M.G., Kale, C.M. and Patki, S.Y. Building Drawing: with an integrated approach to built environment, 7th ed. Tata Mc Graw Hill Pub., Delhi, 2000.
- Bies, D.John. Architectural Drafting: Structure and Environment Bobbs – Merril Educational Pub., Indianapolis.
- Nelson, A. John. H.B. of Architectural and Civil Drafting, Van Nostrand Reinhold, New York, 1983.
- Francis D. Ching – Architectural Graphics , Wiley publishers, 2002