

Drawing & Representation Techniques-II

Course Code:

Level: 1

Credits: 4

Pre-Requisite: None

Duration Contact Hours:

i. Theory: Nil

ii. Practical: 135 (6 Cr x 1.5 x15)

iii. Self-Study/Project/Industry: Nil

Aim

The course aims to develop a basic understanding of 2-Dimensional and 3-Dimensional drawings, orthographic projections by hand, understanding of scale and developing a sense of 3D-Visualization through model making.

Expected Learning Outcomes

At the end of the course, the student is expected to be able to:

1. Develop understanding of basic terminologies and graphical conventions used in interior drawings. To demonstrate skills on using scales & hand drafting tools.
2. Understanding of measurement of existing spaces using different measurement tools and doing basic measured drawings.
3. Develop skill of doing manual freehand sketches, perspectives using different methods.
4. Develop an aesthetical sense of presentation and rendering techniques using different mediums and methods. Assess command over lettering skills used in presenting the work.
5. Demonstrate understanding of space visualization in 3D and sense of scale through model making.

Learning and Teaching Strategy

The course is delivered via face-to-face mode; Classes will consist of studio work, tutorials, Critiques, presentations, field trips, exercises, project reviews, Individual and team works.

Course Content

Unit I: Introduction to CAD/similar software and user interface

Introduction to the basic of software.

Learning how to open a new file, setting of units, drawing precisions & other drawing aids.

Basic understanding of different toolbars and model-space in CAD.

Use of Layers, line weights, line types, and their properties and their use in drafting.

Study of basic drawing and drafting tools (line, circle, rectangle, polygon, arc, etc.)

Modify Tools - Move, Copy, Rotate, Trim, Scale, Mirror, Fillet, etc.

Setting of Dimension Units, Text height and Text Style, Hatch style.

Study of Templates and Design Centre, Blocks, drafting symbols, Attributes

Study of Plotting techniques and Sheet Composition- setting of ISO Paper Sizes, paper-space, setting up plotter, converting DWG to PDF and JPEG.

Unit II: Interior Plans, Elevations & Sections

Drawing Interior floor plans using Orthographic Projections

Drawing Interior elevations using Orthographic Projections

Drawing sections using Orthographic Projections

Unit III: Introduction to Photoshop/Photo editing software

Introduction to the software and user interface and basic settings and opening a new file in the software using Open and/or using Place and Import Tools.

Use of primary tools like Crop, Clone Stamp, Paint Bucket, Pen, etc. Use of layers, styles and swatches.

Use of editing tools like rotate, move, copy, scale, skew, distort, etc. Use of filters for additional effects.

Setting of print paper sizes, resolutions, orientations, etc.

Preparing high resolution presentation drawings of 2d work- Plans, Elevations & Sections

Unit IV: Introduction to Illustrator/Vector editing software

Understand the fundamentals of CMYK and RGB colors

Setting up the artboard, creating a background shape, Using symbols, Effects & transparency.

Combining shapes, sampling a color, Applying a fill and stroke, Applying color and effects, Aligning and distributing shapes, Adding text, Distorting a shape, importing an image, working with color, color books and custom colors.

Unit V: Introduction to Sketch up and user interface

Introduction to the software and user Interface.

Templates, toolbars, Model settings, Basics of the drawing tools, organize the model with layers & scenes. Create different parts of an interior space, including the ceiling, staircase, doors and windows. Create basic interior furniture like beds, tables, chairs from reference photographs.

Drawing of 3d model of an interior space

Suggested Assessment Scheme

Assessment 1: CAD drawing of Architectural & Interior Elements and space	30%
Assessment 2: Photo Editing Presentation of Poster/Artwork	10%
Assessment 3: Vector Based Presentation Poster/Artwork	10%
Assessment 4: Sketch Up Model of Interior Elements and Space	30%
Assessment 5: Rendered Sheets of Interiors using CAD and Photo/Vector software	20%

References

Required Texts

CADArtifex, et.al (2021) AutoCAD 2022: A Power Guide for Beginners and Intermediate Users.

Jenkins, S. (2009) How to do everything: Adobe Illustrator CS4. McGraw Hill Companies.

Perkins, C. (2009) How to do everything: Adobe Photoshop CS4. McGraw-Hill Companies.

Roskes, B. (2009) Google Sketch Up 7 Hands-On: Basic and Advanced Exercises. 3DVinci.

Reference Texts

Mitton, M., (2012) Interior Design Visual Presentation: A Guide to graphics, models, and presentation techniques, Wiley & Sons, Inc.

Dayle, B. & Dayley, D. (2012) Adobe Photoshop CS6 Bible. Wiley.

Gaspar, J. (2011) Google Sketch Up Pro 8 Step by Step. VectorPro.

Johnson, S. (2012) Adobe Illustrator CS6 on Demand Adobe Illustrator CS6: Learn by Video – Master the Fundamentals. Que Publishing.

Starks, J.L. (2012) Adobe Photoshop CS6: Complete

Adode (2018), Adobe Photoshop CC Help

https://helpx.adobe.com/pdf/photoshop_reference.pdf

Perkins, C. (2009) How to do everything: Adobe Photoshop CS4. McGraw-Hill Companies

Adobe Photoshop CS6 Tutorials.

<http://www.marquette.edu/ctl/e-learning/documents/PhotoshopPDF.pdf>

Dayle, B. & Dayley, D. (2012) Adobe Photoshop CS6 Bible. Wiley.

Andrew Faulkner, Conrad Chavez (2015) Adobe Photoshop CC Classroom in a Book, the official creator of video training for CorelDraw X4, X5, and X6.

Web links

Adode (2018), Adobe Photoshop CC Help

https://helpx.adobe.com/pdf/photoshop_reference.pdf

Perkins, C. (2009) How to do everything: Adobe Photoshop CS4. McGraw-Hill Companies
Adobe Photoshop CS6 Tutorials.

<http://www.marquette.edu/ctl/e-learning/documents/PhotoshopPDF.pdf>