

Design fundamentals - Web course

COURSE OUTLINE

This course is on design fundamentals, Aiming at understanding about basic design elements and its principles and applications of various needs for designer and artists through various illustrative examples and references given in the course to make them easy to understand. It is a primary level course for student of Art and design, not basically meant for engineering student.

COURSE MATERIAL

Sl. No.	Module/ Lecture Topics	No. of (Total) Hours
1.	Basic understanding of various shapes, forms and their structure <ol style="list-style-type: none"> 1. Visual Proportion 2. Form structure 3. Various shapes 4. Figure and ground relation, types of form 5. Inter-relationship of form and shape 	5
2.	Understanding basic principles of perception including depth and its representation <ol style="list-style-type: none"> 1. Visual principles 2. Application of figure and ground 3. Visual perception 4. Perspective 	4
3.	Introduction to different mediums, and tools to create surface textures <ol style="list-style-type: none"> 1. Surface textures 2. Use of lead and graphite pencil 3. Use of pencil for creating texture 	3



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Engineering Design

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4.	<p>Developing basic drawing</p> <ol style="list-style-type: none"> 1. Lines 2. Semantics of lines <p>5.</p>	2
5.	<p>Nature drawing - to study form and structure and various shapes</p> <ol style="list-style-type: none"> 1. Structures of shapes and its applications 2. Sketching 3. Creating depth in nature drawing 4. How to draw still life 5. Understanding of basic shapes 6. Observation 7. 3-D layout 	7
6.	<p>Representation of basic 3-dimensional forms: cubes, cylinders, cones, spheres etc</p> <ol style="list-style-type: none"> 1. Looking at object 2. Vision(in visual context) 3. Convergence 	3
7.	<p>Memory drawing and quick sketching</p> <ol style="list-style-type: none"> 1. Memory drawing 2. Quick sketching 1 3. Quick sketching 2 	3
8.	<p>Introduction to basic principles of design using the visual elements- point, line, plane and volume, Lines – straight, curved and kinked</p> <ol style="list-style-type: none"> 1. Visual elements 1 2. Visual elements 2 3. Visual elements 3 	3
9.	<p>Attributes of the visual elements for an understanding of the visual principles of composition balance, rhythm, contrast, harmony, order and chaos</p> <ol style="list-style-type: none"> 1. Principles of composition 1 2. Principles of composition 2 3. Order and Chaos 	3
10.		

Introduction to fundamental principles of colour, colour theory: hue, value, saturation, gray scale, cool and warm colour. Visual patterns, textures.

1. Basic colour theory
2. Understanding colour in design context
3. Colour interection
4. Colour contrast
5. Visual weight of colour
6. Pattern and texture 1
7. Pattern and texture 2

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References:

1. How to draw and paint by Bodo W. Jaxtheimer. Publisher: Thames and Hudson; 1982.
2. Wikipedia
3. Rendering with Pen and Ink by Robert W.Gill. Publisher: Thames and Hudson; 1984.
4. Visual Research by Ian Noble and Russell Bestley. Publisher: Thames and Hudson; 2005.
5. Graphic design by Rob Carter, Ben Day and Philip meggs. Publisher: John Willy & Sons, Inc; 2007
6. Author's Class assignments.
7. Edwards, Betty; New Drawing on the Right Side of the Brain, Publisher: Tarcher; 2002
8. Itten, Johannes; The Art of Color: The Subjective Experience and Objective Rationale of Color, Wiley Publications,1997
9. Lauer, David; Design Basics, Wadsworth Publishing, 1999
10. Frutiger, Adrian; Signs and Symbols: Their Design and Meaning by, Watson-Guptill Publications, 1998
11. Klee, Paul; Notebooks. Vol.1: The thinking eye, Wittenborn Art Books, 1978
12. Mckim Robert H : Experiences in visual thinking, Brooks/Cole Publishing Co., California, 1972
13. Schmid, Helmut; Typography Today, Seibundo Shinkosha, 1980.