



Gyanmanjari
Innovative University

Course Syllabus
Gyanmanjari Institute of Design
Semester-3

Subject: Computer Aided Design - BDEFD13324

Type of course: Major

Prerequisite: Students should have basic knowledge of computer operations for fundamental element of design visually. While no prior experience with design software is required, an interest in creativity, digital design, and a willingness to learn tools like Photoshop and Illustrator will ensure better learning and application of skills throughout the course.

Rationale: The subject Computer Aided Design enables students to develop essential digital design skills using tools like Photoshop and Illustrator. It helps them create professional artworks, patterns, and layouts, bridging the gap between manual and digital design. This subject prepares students for modern industry demands through creative and practical learning.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks					Total Marks
CI	T	P	C	Theory Marks		Practical Marks (E)		CA (I)	
				ESE	MSE	V	P	ALA	
0	2	4	4	00	00	10	40	50	100

Legends: CI-Classroom Instructions; T – Tutorial; P - Practical; C – Credit; ESE - EndSemester Examination; MSE- Mid Semester Examination; V – Viva; CA - Continuous Assessment; ALA- Active Learning Activities.

Course Content:

Sr. no.	Course content
1	Unit -1 Photoshop & Illustrator 1.1 Introduction 1.2 Tools & Technique 1.3 Uses



2	Unit – 2 Designing Using Illustrator 2.1 Shape & Crop Tool 2.2 Ellipse & Text Tool 2.3 Connector & Dimension Tool
3	Unit – 3 Designing Using Photoshop 3.1 Brush & Eraser Tool 3.2 Pencil & Pen Tool 3.3 Shape & Text Tool 3.4 Gradient & Lasso Tool
4	Unit – 4 Artwork Creation (Illustrator/Photoshop) 4.1 Use tool from above unit 4.2 Garment Creation
5	Unit – 5 Theme Based 5.1 Repeat Pattern 5.2 Color Scheme 5.3 Collection using Croquis

Continuous Assessment:

Sr. No.	Active Learning Activities	Marks
1	Illustrator Design: Make a final design using Illustrator tools and upload the digital sheet on the GMIU web portal.	10
2	Photoshop Design: Make a final design using photoshop tools and upload the digital sheet on the GMIU web portal.	10
3	Artwork Design: Make a creative art design using Illustrator or Photoshop tools and upload the digital sheet on the GMIU web portal.	10
4	Final Collection Design: Make a final Collection using Illustrator or Photoshop tools and upload the digital sheet on the GMIU web portal.	10
5	Attendance	10
	Total	50



Suggested Specification table with Marks (Theory):NA

Distribution of Theory Marks (Revised Bloom's Taxonomy)						
Level	Remembrance(R)	Understanding(U)	Application(A)	Analyze (N)	Evaluate (E)	Create (C)
Weight age	NA	NA	NA	NA	NA	NA

Note: This specification table shall be treated as a general guideline for students and teachers.
The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcome:

After learning the course, the students should be able to:	
CO1	Understand the function of Illustrator and Adobe Photoshop.
CO2	Explore the tools and use them in creative manner.
CO3	Design and develop the idea digitally using Adobe Illustration & Adobe Photoshop.
CO4	Design the pattern for surface digital fabric.

List of Practical

Sr. No	Description	Unit No	Hrs.
1	Label and describe the use of 5 major tools from each software.	1	4
2	Explore Photoshop and Illustrator interfaces and identify toolbars, menus, and workspace layouts.	1	4
3	Create a layout using Rectangle, Circle, and Polygon shapes using Shape tool.	2	4
4	Crop different parts of image creatively using the Crop tool.	2	2
5	Use text formatting and add dimension to drawings.	2	4
6	Design a poster using the Ellipse tool, Text tool and Connector lines.	2	4
7	Add measurements using the Dimension tool.	2	2
8	Create a background using different brushes.	3	4
9	Use the eraser creatively to add texture or transparency.	3	4



10	Draw a leaf or object using the Pen tool.	3	2
11	Apply multiple gradient shades for a natural look.	3	2
12	Design a greeting card with layered text.	3	4
13	Use Lasso to extract and blend image elements.	3	2
14	Create a digital poster (e.g., Fashion Event / Exhibition / Product Ad) use shapes, text, gradient, cropping, and pen tools.	4	4
15	Design one motif using Photoshop/Illustrator.	4	2
16	Create a Pattern collection using Illustrator or Photoshop	5	4
17	Select a theme (nature, culture, season), Create a color palette, apply it to a visual composition & Apply color theory and visual harmony using Illustrator & Photoshop.	5	4
18	Create a whole theme base collection using previous color palette, Pattern and Garment.	5	4
Total			60

Instructional Method:

The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.

From the content 10% topics are suggested for flipped mode instruction.

Students will use supplementary resources such as online videos, NPTEL/SWAYAM videos, e-courses, Virtual Laboratory

The internal evaluation will be done on the basis of Active Learning Assignment

Practical/Viva examination will be conducted at the end of semester for evaluation of performance of students in laboratory.

Reference Books:

- [1] Adams, S. (2018). CorelDraw: The Official Guide (12th ed.). McGraw-Hill Education.
- [2] McClelland, D. (2013). Adobe Photoshop CS6 on demand. Que Publishing
- [3] Eismann, K., & Duggan, S. (2014). Photoshop restoration & retouching (3rd ed.). New Riders.
- [4] McClelland, D., & Chavez, L. (2019). Adobe Photoshop CC Classroom in a Book (2019 release). Adobe Press

