

GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)

Competency-focused Outcome-based Green Curriculum-2021 (COGC-2021)

Semester - III

Course Title: Digital Illustration

(Course Code: 4335107)

Diploma programme in which this course is offered	Semester in which offered
Computer Aided Costume Design & Dress Making	Third

1. RATIONALE

This course will provide opportunities for exploring current graphic design software. It will help students to create digital illustrations with detailing of fashion model drawing, which is required for designing and editing real life applications in the field of fashion design. This course will give knowledge & practice with a fundamental understanding of the advance software viz. Adobe Illustrator and Adobe Photoshop that is used for designing and editing purpose. The main emphasis would be to provide Graphic based platform to the students, so that they can cater the need of the fashion designing industry as per the requirement.

2. COMPETENCY

The course content should be taught and implemented with the aim to develop different types of skills leading to the achievement of the following competency:

- **Create mood board, fashion illustration, garment designs with accessories and the corporate print materials using Adobe Illustrator and Adobe Photoshop software effectively.**

3. COURSE OUTCOMES (COs)

The practical exercises, the underpinning knowledge and the relevant soft skills associated with the identified competency are to be developed in the student for the achievement of the following COs:

- a) Create Mood board using Adobe Photoshop software.
- b) Reproduce Fashion Illustration with special effects using Adobe Photoshop software.
- c) Design garment with accessories using various tools of Adobe Illustrator software.
- d) Develop Corporate Print material using various tools of Adobe Illustrator software.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme (In Hours)			Total Credits (L+T+P/2)	Examination Scheme				Total Marks
				Theory Marks		Practical Marks		
L	T	P	C	CA	ESE	CA	ESE	
0	0	4	2	0	0	50*	50	100

()*: For this practical only course, 50 marks under the practical CA has two components i.e. the assessment of micro-project, which will be done out of 10 marks and the remaining 40 marks are for the assessment of practical. This is designed to facilitate attainment of COs holistically, as there is no theory ESE.

Legends: *L*-Lecture; *T* – Tutorial/Teacher Guided Theory Practice; *P* -Practical; *C* – Credit, *CA* - Continuous Assessment; *ESE* -End Semester Examination.

5. SUGGESTED PRACTICAL EXERCISES

The following practical outcomes (PrOs) are the sub-components of the COs. *They are crucial for that particular CO at the 'Precision Level' of Dave's Taxonomy related to 'Psychomotor Domain'.*

Sr. No.	Practical Outcomes (PrOs)	Unit No.	Approx. Hrs. required
1	Prepare Mood board/Theme board using Adobe Photoshop software.	II	06*
2	Reproduce Fashion Illustration with six different types of fabric and texture in garment using Adobe Photoshop software.	II	12*
3	Design garments with suitable accessories using Adobe Illustrator software. <ul style="list-style-type: none"> • Evening Gown • Kurta with Chudidar/Salwar/Palazzo/Pant • Traditional wear for Female (for e.g. Saree/Sharara suit/Choli suit, etc.) • Traditional wear for Male (for e.g. Kurta with Pyjama/Dhoti, Sherwani suit, etc.) • Formal wear for Male • Fusion wear (1 for Male, 1 for Female) 	IV	24*
4	Create Corporate print materials for Product development and promotion related to Fashion Industry using Adobe Illustrator/ Photoshop. <ul style="list-style-type: none"> • Logo • Poster • Flyer • Catalogue • Packaging Design (minimum 03) 	II & IV	14*
Minimum Practical Hours			56

Note

*i. More **Practical Exercises** can be designed and offered by the respective course teacher to develop the industry relevant skills/outcomes to match the COs. The above table is only a suggestive list.*

*ii. The following are some **sample** 'Process' and 'Product' related skills (more may be added/deleted depending on the course) that occur in the above listed **Practical Exercises** of this course required which are embedded in the COs and ultimately the competency.*

Sr. No.	Sample Performance Indicators for the PrOs	Weightage in %
1	Selection of the appropriate tools for digital illustration.	10
2	Creating the digital illustration as per given specification.	50
3	Accuracy of the digital illustration.	20
4	Submission of the digital illustration as per given guidelines.	20
Total		100

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

This major equipment with broad specifications for the PrOs is a guide to procure them by the administrators to usher in uniformity of practicals in all institutions across the state.

Sr. No.	Equipment Name with Broad Specifications	PrO. No.
1.	Computer System.	1 to 4
2.	Color Printer	1 to 4

7. AFFECTIVE DOMAIN OUTCOMES

The following *sample* Affective Domain Outcomes (ADOs) are embedded in many of the above-mentioned COs and PrOs. More could be added to fulfil the development of this course competency.

- a) Work as a leader/a team member.
- b) Practice good housekeeping.
- c) Follow ethical practices.

The ADOs are best developed through the laboratory/field-based exercises. Moreover, the level of achievement of the ADOs according to Krathwohl's 'Affective Domain Taxonomy' should gradually increase as planned below:

- i. 'Valuing Level' in 1st year
- ii. 'Organization Level' in 2nd year.
- iii. 'Characterization Level' in 3rd year.

8. UNDERPINNING THEORY

The major underpinning theory is given below based on the higher level UOs of Revised Bloom's taxonomy that are formulated for development of the COs and competency. If required, more such UOs could be included by the course teacher to focus on attainment of COs and competency.

Unit	Unit Outcomes (UOs) (4 to 6 UOs at different levels)	Topics and Sub-topics
<p>Unit – I</p> <p>Adobe Photoshop Basics</p>	<p>1a. Draw drawing editor of Adobe Photoshop software.</p> <p>1b. Fetch Images into Photoshop.</p> <p>1c. Save Adobe Photoshop image.</p> <p>1d. Explain Title bar, Menu bar, Property bar in Adobe Photoshop software.</p> <p>1e. Use Title bar, Menu bar, in Adobe Photoshop software.</p>	<p>1.1 Introduction to Adobe Photoshop meaning and its use</p> <p>1.2 Launching Adobe Photoshop software</p> <p>1.3 Drawing Editor</p> <p>1.4 Property bar</p> <p>1.5 Create new file in Adobe Photoshop</p> <p>1.6 Title bar</p> <p>1.7 Menu bar</p> <p>1.8 Image window</p> <p>1.9 Status bar</p> <p>1.10 Fetching new image in Adobe Photoshop</p> <p>1.11 Opening an existing image in Adobe Photoshop</p> <p>1.12 Saving image in Adobe Photoshop software</p>
<p>Unit – II</p> <p>Adobe Photoshop tools and commands</p>	<p>2a. Edit image using Adobe Photoshop.</p> <p>2b. Use Adobe Photoshop Libraries.</p> <p>2c. Explain Photoshop interface and various tools available in Photoshop tool box like selection, Retouching and color adjustment.</p> <p>2d. Use Text tool, Layer management tools & Image transformation.</p> <p>2e. Reproduce Fashion Illustration images in Photoshop.</p> <p>2f. Work on Graphic design mood board by using collage concept</p>	<p>2.1 Selection tools</p> <p>2.1.1. Rectangular marquee tool</p> <p>2.1.2. Elliptical marquee tool</p> <p>2.1.3. Single row marquee tool</p> <p>2.1.4. Single column marquee tool</p> <p>2.1.5. Move tool</p> <p>2.1.6. Lasso tool</p> <p>2.1.7. Polygonal lasso tool</p> <p>2.1.8. Magnetic lasso tool</p> <p>2.1.9. Magic wand tool</p> <p>2.1.10. Crop tool</p> <p>2.2. Retouching and color adjustment tools</p> <p>2.2.1. Healing brush tool</p> <p>2.2.2. Spot healing brush tool</p> <p>2.2.3. Patch tool</p> <p>2.2.4. Colour replacement tool</p> <p>2.2.5. Brush tool</p> <p>2.2.6. Pencil tool</p> <p>2.2.7. Clone stamp tool</p> <p>2.2.8. Pattern stamp tool</p> <p>2.2.9. History brush tool</p> <p>2.2.10. Art history brush tool</p> <p>2.2.11. Eraser tool</p> <p>2.2.12. Back ground eraser tool</p> <p>2.2.13. Magic eraser tool</p>

Unit	Unit Outcomes (UOs) (4 to 6 UOs at different levels)	Topics and Sub-topics
		<p>2.2.14. Gradient tool 2.2.15. Paint bucket tool 2.2.16. Blur tool 2.2.17. Sharpen tool 2.2.18. Smudge tool 2.2.19. Dodge tool 2.2.20. Burn tool 2.2.21. Sponge tool</p> <p>2.3. Path, selection and draw tools 2.3.1. Path selection tool 2.3.2. Direct selection tool 2.3.3. Horizontal and vertical type tool 2.3.4. Add anchor point tool 2.3.5. Delete anchor point tool 2.3.6. Rectangle tool 2.3.7. Rounded rectangle tool 2.3.8. Ellipse tool 2.3.9. Polygon tool 2.3.10. Line tool 2.3.11. Type tool 2.3.12. Custom shape tool 2.3.13. Eye dropper tool 2.3.14. Colour sampler tool 2.3.15. Hand tool 2.3.16. Zoom tool 2.3.17. Changing back ground and foreground colour 2.3.18. Switch foreground and background colour</p> <p>2.4. Working with text 2.4.1. Orientation options 2.4.2. Font family option 2.4.3. Font style option 2.4.4. Font size option 2.4.5. Alignment option 2.4.6. Text colour option 2.4.7. Wrap text option</p> <p>2.5. Layer Management and special effect 2.5.1. Blending modes 2.5.2. Opacity settings 2.5.3. Lock transparent pixels 2.5.4. Lock position 2.5.5. Lock all 2.5.6. Layer visibility 2.5.7. Add layer</p>

Unit	Unit Outcomes (UOs) (4 to 6 UOs at different levels)	Topics and Sub-topics
		2.5.8. Create new layer 2.5.9. Delete layer 2.6. Photoshop palletes 2.6.1. Colour palletes 2.6.2. Info palette 2.6.3. Option palletes 2.6.4. Swatches palletes 2.6.5. Style palletes 2.6.6. History palletes 2.6.7. Layer palletes
Unit– III Adobe Illustrator Basics	3a. Draw drawing editor of Adobe Illustrator software. 3b. Explain Illustrator basics and interface. 3c. Select object of Adobe Illustrator software. 3d. Use Pull-down menu of Adobe Illustrator software. 3e. Create and save drawing in Adobe Illustrator software. 3f. Explain Property bar of Adobe Illustrator software.	3.1. Illustrator: Getting Started Introduction, Workspace & Navigation 3.1.1. Introduction to Drawing editor 3.1.2. Introducing Vector Based Paths 3.1.3. Working with Layers in Illustrator 3.1.4. Introducing Anchor Points 3.1.5. Creating a New Document 3.1.6. Repositioning and Adjusting View 3.1.7. Saving the Document 3.1.8. Using Color Settings 3.1.9. Configuring Palettes & Workspace Rulers
Unit– IV Adobe Illustrator tools and commands	4a. Explain Adobe Illustrator tool bar 4b. Create and manipulate objects in Adobe Illustrator software. 4c. Use appropriate tools and command in Adobe Illustrator software. 4d. Create Text with special effects using Adobe Illustrator software. 4e. Create flat drawing of the Garments using Adobe Illustrator software. 4f. Create Corporate Print material using Adobe Illustrator software.	4.1. Introduction to Gradient 4.1.1. Using Gradient Tool 4.1.2. Applying a Gradient 4.1.3. Making Color adjustments 4.1.4. Using Eye Dropper Tool 4.1.5. Creating a Gradient Mesh 4.1.6. Expanding a Gradient Mesh 4.1.7. Modifying Gradient Mesh Colors 4.1.8. Modifying Gradient Mesh Points and Control Handles 4.2. Illustrator Drawing, Editing and Symbol Tools 4.2.1. Line segment tool 4.2.2. Arc tool 4.2.3. Spiral tool 4.2.4. Rectangular grid tool 4.2.5. Polar grid tool

Unit	Unit Outcomes (UOs) (4 to 6 UOs at different levels)	Topics and Sub-topics
		4.2.6. Rectangle tool 4.2.7. Rounded rectangle tool 4.2.8. Ellipse tool 4.2.9. Polygon tool 4.2.10. Star tool 4.2.11. Using the Flip Tool to Mirror Shapes 4.2.12. Combining Shapes 4.2.13. Pen Tools and Path Editing 4.2.14. Convert anchor point 4.2.15. Add Anchor point 4.2.16. Joining anchors 4.2.17. Drawing with the Pen Tool 4.2.18. Cutting, Extending, and Closing Paths 4.2.19. Pencil Tool 4.2.20. Smooth tool 4.2.21. Eraser tool 4.2.22. Calligraphic brush 4.2.23. Art brush 4.2.24. Pattern brush 4.2.25. Loading and saving brushes 4.2.26. Creating custom Brushes 4.2.27. Editing art brush stroke 4.2.28. Converting Text To An Art Brush tool 4.2.29. Scissor tool 4.2.30. Object alignment 4.2.31. Object opacity 4.2.32. Transparency Palette 4.2.33. Assigning Different Opacity For Stroke And Fill 4.2.34. Blending modes 4.2.35. Blending multiple objects 4.2.36. Simple Color Gradients 4.2.37. Creating Custom Gradients via Blending 4.2.38. Creating Blends Between Two Shapes

9. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
			Not Applicable			

Legends: R=Remember, U=Understand, A=Apply and above (Revised Bloom's taxonomy)

10. SUGGESTED STUDENT ACTIVITIES

Other than the classroom and laboratory learning, following are the suggested student-related **co-curricular** activities which can be undertaken to accelerate the attainment of the various outcomes in this course. Students should perform following activities in group and prepare reports of about 5 pages for each activity. They should also collect/record physical evidences for their (student's) portfolio which may be useful for their placement interviews:

- a) Prepare accessories for casual garment.
- b) Internet based assignments.
- c) Teacher guided self learning activities.
- d) Draw drawing Editor of Adobe Photoshop software.
- e) Draw drawing Editor of Adobe Illustrator software.

11. SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES (if any)

These are sample strategies, which the teacher can use to accelerate the attainment of the various outcomes in this course:

- a) Massive open online courses (**MOOCs**) may be used to teach various topics/sub topics.
- b) Guide student(s) in undertaking micro-projects.
- c) '**L**' in **section No. 4** means different types of teaching methods that are to be employed by teachers to develop the outcomes.
- d) About **20% of the topics/sub-topics** which are relatively simpler or descriptive in nature is to be given to the students for **self-learning**, but to be assessed using different assessment methods.
- e) With respect to **section No.10**, teachers need to ensure to create opportunities and provisions for **co-curricular activities**.
- f) Guide students for using the strategies given in various video for giving special effects.

12. SUGGESTED MICRO-PROJECTS

Only one micro-project is planned to be undertaken by a student that needs to be assigned to him/her in the beginning of the semester. In the first four semesters, the micro-project are group-based (group of 3 to 5). However, **in the fifth and sixth semesters**, the number of students in the group should **not exceed three**.

The micro-project could be industry application based, internet-based, workshop-based, laboratory-based or field-based. Each micro-project should encompass two or more COs which are in fact, an integration of PrOs, UOs and ADOs. Each student will have to maintain

dated work diary consisting of individual contribution in the project work and give a seminar presentation of it before submission. The duration of the microproject should be about **14-16 (fourteen to sixteen) student engagement hours** during the course. The students ought to submit micro-project by the end of the semester to develop the industry-oriented COs.

A suggestive list of micro-projects is given here. This has to match the competency and the COs. Similar micro-projects could be added by the concerned course teacher:

- a) **Texture:** Apply texture on any 05 garment using Adobe Photoshop software.
- b) **Decorative Accessories:** Create advertisement material for fashion promotion using Adobe Photoshop software.
- c) **Fabric Designing:** Create fabric for dress material as per current trend using Adobe Illustrator software.
- d) **Home furnishing Articles:** Create any 03 Home furnishing articles using Adobe Illustrator software.

13. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication with place, year and ISBN
1	Photoshop CC: Visual Quick Start Guide	<u>Elaine Weinmann</u>	Peachpit Press; ISBN-13: 978-0134308890 ISBN-10: 0134308891
2	Adobe Photoshop: A Complete Course and Compendium of Features	Stephen Laskevitch	Rocky Nook; Illustrated edition (June 2, 2020) ISBN-13: 978-1681985152 ISBN-10: 1681985152
	Rendering Fashion, Fabric and Prints with Adobe Photoshop	M Kathleen Colussy	Pearson India ISBN-10 : 8131709973 ISBN-13 : 978-8131709979
3	Adobe Illustrator Classroom in a Book	Brian Wood	Adobe Press; 1st edition (December 27, 2021) ISBN-13: 978-0137622153 ISBN-10: 0137622155
4	Creating Pattern Brushes in Adobe Illustrator: Easy To Follow Step-By-Step Instructions	Susan Rutledge	Willow Bend Press (September 4, 2020) ISBN-10 : 1950019160 ISBN-13 : 978-1950019168
5	Learn Adobe Illustrator Cc for Graphic Design And Illustration	Rob Schwartz	Pearson India ISBN: 9789389552393
6	Adobe illustrator for beginners 2021: learn graphic design with illustrator	Hector grant	Independently published (January 17, 2021) ASIN : B08T4885YN ISBN-13 : 979-8596295214

14. SOFTWARE/LEARNING WEBSITES

- <https://youtu.be/dAm08pDLBvI>
- https://youtu.be/lyR_uYsRdPs
- <https://youtu.be/xRUxEqD2D5c>
- <https://youtu.be/3GzumUieDPY>
- https://youtu.be/uwalf_yHW2E
- <https://youtu.be/WFQA1KGKOVg>
- <https://youtu.be/Ckk-NjTMCx8>

15. PO-COMPETENCY-CO MAPPING

Semester III	DIGITAL ILLUSTRATION (Course Code: 4335107)						
	POs						
Competency & Course Outcomes	PO 1 Basic & Discipline specific knowledge	PO 2 Problem Analysis	PO 3 Design/ development of solutions	PO 4 Engineering Tools, Experimentation & Testing	PO 5 Engineering practices for society, sustainability & environment	PO 6 Project Management	PO 7 Life-long learning
Competency	Create mood board, fashion illustration, garment designs with accessories and corporate Print materials using Adobe Illustrator and Adobe Photoshop software effectively						
Course Outcomes							
CO a) Create Mood board using Adobe Photoshop software.	3	2	3	3	2	3	3
CO b) Reproduce Fashion Illustration with special effects using Adobe Photoshop software.	3	3	3	3	2	3	3
CO c) Design garment with accessories using various tools of Adobe Illustrator software.	3	3	3	3	2	3	3
CO d) Develop Corporate Print material using various tools of Adobe Illustrator software.	3	3	3	3	2	3	3

Legend: '3' for high, '2' for medium, '1' for low and '-' for no correlation of each CO with PO.

16. COURSE CURRICULUM DEVELOPMENT COMMITTEE

GTU Resource Persons

Sr. No.	Name and Designation	Institute	Contact No.	Email
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