



GUJARAT TECHNOLOGICAL UNIVERSITY

Program Name: Diploma in Engineering

Level: Diploma

Branch: Computer Aided Costume Design and Dress Making

Course / Subject Code: DI01051021

Course / Subject Name: Fundamental of Design

w. e. f. Academic Year:	2024-25
Semester:	1 st
Category of the Course:	BSC-02

Prerequisite:	NA
Rationale:	This course is designed to develop artistic skill in students to take themselves in the field of garment design. It develops the skills of basic drawing art that is required for garment design. The course also provides basic knowledge for drawing proportionate human figures, elements of design, principles of design etc. which will be useful in garment design. In addition, the knowledge of various types of silhouette and different types of body figures enables the designers to design garments as per figure types.

Course Outcome:

After Completion of the Course, Student will able to:

No.	Course Outcomes	RBT Level
01	Utilize tools and materials for drawing and sketching.	A
02	Explain the elements of design and its psychological effect.	U
03	Apply principles of design in clothing using appropriate elements of design.	A
04	Explain human figure proportion and type of silhouettes.	U
05	Choose appropriate dress for various type of human figures.	A

*Revised Bloom's Taxonomy (RBT)

Teaching and Examination Scheme:

Teaching Scheme (in Hours)			Total Credits L+T+ (PR/2)	Assessment Pattern and Marks				Total Marks
L	T	PR	C	Theory		Tutorial / Practical		
				ESE (E)	PA / CA (M)	PA/CA (I)	ESE (V)	
3	0	2	4	70	30	20	30	150



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Course Content:

Unit No.	Content	No. of Hours	% of Weightage
1.	Basics of drawing tools and materials 1.1 Drawing and sketching tools such as Pencil, Pen, Ink pen, Pencil colours, Sketch pen, Felt tip pen, Markers, Polychrome colour, Acrylic colour, Charcoal pencil/chalk, T-square, Set square, French curve. Protector, Scale, Compass, Divider, Water colour. Pastel colour, Brush, Crayon wax etc. 1.2 Drawing and sketching material such as Drawing sheets/paper, Drawing book, Drawing board etc.	05	10
2.	Elements of design 2.1 Line: Definition of line, different types of line, aspects of line, its physical and psychological effects on human figure. (Horizontal, Vertical, Diagonal, Curve, Zigzag etc.) 2.2 Space: Definition of space, cues influencing perception of shape and space, physical and psychological effect of space. 2.3 Shape and form: Definition, equal sided flat shapes, unequal sided flat shapes, equal sided forms, unequal sided forms, some shapes that fit snugly together, shapes not fitting together create other shapes between them. (With reference to practical.) 2.4 Texture: Definition and concept of texture, types of textures, psychological and physical effect of texture. 2.5 Colour – Definition, psychological and physical effects of colour, primary, secondary and tertiary colours. Neutral colors, dimension of colour – Hue, Value & Intensity, Tints, Shades and Tones, Warm and Cool colour. Colour scheme – Neutral, Analogous, Monochromatic, Complementary, Double complementary, Split complementary, Double split complementary, Triad colour scheme etc.	10	25
3.	Principles of design 3.1 Harmony-Definition, concept, physical & psychological effects of harmony. 3.2 Balance-Definition, concept, types, physical & psychological effects of balance. 3.3 Emphasis -Definition, concept, physical & psychological effects of emphasis. 3.4 Proportion-Definition, concept, physical & psychological effects of proportion.	10	25



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	3.5 Rhythm- Definition, physical & psychological effects of Rhythm and Different ways of achieving Rhythm by Repetition, Parallelism, Sequence, Alternation, Gradation, Transition and Radiation.		
4.	Human figure proportions 4.1 Basic human proportions of male as well as female (Eight head theory) and child. 4.2 Importance of eight head theory. 4.3 Comparative analysis of male, female and child ideal proportions.	06	15
5.	Silhouette and its variations. 5.1 Definition and importance of silhouette. 5.2 Basic silhouettes and its variations - Bell, Bustle, Angular, Tubular, Wedge, A-line, Hourglass etc.	04	10
6.	Figure types 6.1 Basic body Types –Triangular, Inverted triangular, and Rectangular, Hourglass, Diamond, Tubular, Oval or Rounded figure types. 6.2 Pattern design & flattering different type of figures- Stout figure, Thin figure, Narrow shoulder, Broad shoulder, Round figure, Large Bust, Flat chest, Large Hip, Large waist & Hips, Large abdomen, Long Waist and slender figure, Short Waist, Sway Back, Long Neck, Short or thick neck	10	15
Total		45	100

Suggested Specification Table with Marks (Theory):

Distribution of Theory Marks (in %)					
R Level	U Level	A Level	N Level	E Level	C Level
10	20	30	5	5	30

Where R: Remember; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create (as per Revised Bloom's Taxonomy)

References/Suggested Learning Resources:

(a) Books:

1. Visual design in dress by Marian L Devis, Published by PEARSON, USA. in 1996 (ISBN- : 9780131121294 ISBN-: 9780131121294)
2. Individuality in clothing selection and personal appearance by Mary Kefgan Published by Prentice Hall PTR in 1971, (ISBN 13: 9780130358653)
3. Colour and line in dress by Hemstead Published by Lawrance Prantice Hall in 2012 (ISBN-10: 1258256517, ISBN-13: 1258256517-978)



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4. Fashion design illustration Men by Patrick John Ireland Published by B.T. Batsford Ltd. London in 1996
5. M/c calls' Sewing in colour by Hamlyn in 1971
6. How you look and dress? By Byrta Carson Published by McGraw hill book co. in 1969 (ISBN-13: 0070101746-978)
7. Art in Everyday Life by Harriet Goldstein Published by The Macmillan Company in 1929

(b) Open-source software and website:

1. <http://www.purushu.com/2010/08/elements-of-design-in-fashion.html>
2. <https://www.proprofs.com/quiz-school/story.php?title=elements-principles-design-1>
3. <https://archive.org/details/artineverydaylif008800mbp>
4. <http://williamson.agrilife.org/files/2014/09/principleselements.pdf>
5. <https://ncert.nic.in/textbook/pdf/lehe201.pdf>
6. [https://www.subhartidde.com/slms/BFA\(F\)%20104%20SE%201%20Principles%20of%20Design.pdf](https://www.subhartidde.com/slms/BFA(F)%20104%20SE%201%20Principles%20of%20Design.pdf)
7. <https://www.khanacademy.org/humanities/ap-art-history/start-here-apah#elements-of-artapah>
8. <http://www.invisionapp.com/design-defined/principles-of-design/>
9. <http://www.sewguide.com/dress-for-bodyshape/?amp=1>
10. <https://egyankosh.ac.in/bitstream/123456789/92811/1/Unit-2.pdf>
11. <https://textilelearner.net/silhouette-in-fashion-design/>

Suggested Course Practical List: If any

Pr. No.	List of Practical	Hours
1	Draw any five equal-sided flat shapes and ten unequal sided flat shapes.	2
2	Draw any two equal sided three-dimensional forms and ten unequal sided three-dimensional forms.	4
3	Create colour wheel.	4
4	Create tints, shades and tones.	2
5	Create colour schemes with reference to theory.	4
6	Draw the effect of Balance in clothing in relation to the elements of line, space, shape and texture.	2
7	Draw the effect of Emphasis in clothing in relation to the elements of line, space, shape, texture and pattern.	2
8	Draw the effect of Rhythm in clothing in relation to the elements of line, shape and pattern.	2
9	Draw the effect of Gradation in clothing in relation to the elements of line, shape, space, texture and pattern.	4



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10	Sketch proportionate human figures of male, female and child as per eight head theory.	4
		TOTAL 30

List of Laboratory/Learning Resources Required:

Drawing kit

Suggested Project List:

1. Create template of eight/ten/twelve head croquis of female with different poses.
2. Drawing of eyes, hands, face, lips, nose, legs, and hair style of fashion model.
3. Sustainable environment: Draw poster for providing message about Sustainable environment/green technology.
4. Draw effects of different types of line on the garment.
5. Design dress as per given silhouette.
6. Draw Structural and Applied design of garment.
7. Reduce and enlarge any one design.
8. Prepare a chart showing basic body types.

Suggested Activities for Students:

1. Power point presentation
2. Internet based assignments
3. Teacher guided self-learning activities
4. Library/internet/lab based mini-project etc.

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