

GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)

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

Semester - II

Course Title: Design Concept and Design Effect

(Course Code: 4325101)

Diploma programme in which this course is offered	Semester in which offered
Computer Aided Costume Design and Dress Making	Second

1. RATIONALE

This course will provide hands on experiences to students specifically related to design concepts associated with Clothing Construction, Design Fundamental and Fabric Science & Application. The content covered in the courses of Clothing Construction, Design Fundamental and Fabric Science & Application will help the students to carry out the design aspects through illustration. Students will be able to learn about structural design, applied design and the drape of the fabric through this course.

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:

- **Illustrate different types of design effects required for costume design by drawing and sketching.**

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) Draw different types of design/print.
- b) Create drawings and sketches illustrating different types of fullness techniques, trimmings and fasteners required for fashion design.
- c) Draw various patterns of stripes, checks and plaids.
- d) Draw different types of fabric falls, drapes, textures and patterns.

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	00	00	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	Draw different types of design/print (5 design/print of each) 1.1 Natural 1.1.1 Floral 1.1.2 Animal 1.2 Geometric 1.3 Abstract 1.4 Man-made 1.5 Decorative 1.6 Nursery 1.7 Polka-dot	I	8*
2	Draw different types of darts. 2.1 Half dart 2.2 Full dart (fish dart)	II	2*
3	Draw different types of tucks. 3.1 Pin tuck 3.2 Cross tuck 3.3 Corded tuck 3.4 Shell or scalloped tuck	III	2*
4	Draw different types of pleats 4.1 Accordion or Crystal 4.2 Knife pleats 4.3 Box pleats 4.4 Inverted box pleat	IV	4*
5	Draw different types of Ruffles 5.1 Circular ruffles 5.2 Straight ruffles	V	2*
6	Draw different types of Trimmings 6.1 Top stitching 6.2 Tucking 6.3 Faggoting 6.4 Insertion 6.5 Shirring 6.6 Braiding 6.7 Cording 6.8 Rick-rack 6.9 Bias binding 6.10 Quilting 6.11 Smocking	VI	16*

Sr. No.	Practical Outcomes (PrOs)	Unit No.	Approx. Hrs. Required
	6.12 Laces 6.13 Edging 6.14 Eyelet 6.15 Plaiting		
7	Draw different types of buttons, Placket openings	VII	2*
8	Sketch Stripes, Checks and Plaids	VIII	4*
9	Illustrate following Fabric falls and drapes 9.1 Crape 9.2 Soft and Sheer 9.3 Lace 9.4 Tulle and net 9.5 Organdies 9.6 Satin 9.7 Velvet 9.8 Taffeta	IX	8*
10	Draw following Textures and Patterns 10.1 Diagonal 10.2 Herringbone 10.3 Basket weave 10.4 Glen plaids 10.5 Corduroy	X	8*
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.

S.No.	Sample Performance Indicators for the PrOs	Weightage in %
1	Proper usage of tools for drawings and sketches.	20
2	Create the drawings and sketches as per given instruction.	40
3	Ensure quality of drawings and sketches.	30
4	Follow recommended work ethics.	10
Total		100

6. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

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

Sr. No.	Equipment Name with Broad Specifications	PrO. No.
	Not Applicable	

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) Follow ethical practices.
- c) Practice environment friendly methods and processes.

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
I	1a. Identify different types of design/print 1b. Explain different types of design/print 1c. Distinguish between different types of design/print 1d. Draw different types of design/print	Different types of design/print. 1.1 Natural 1.1.1 Floral 1.1.2 Animal 1.2 Geometric 1.3 Abstract 1.4 Man-made 1.5 Decorative 1.6 Nursery 1.7 Polka -dot
II TO VI	Refer course Clothing Construction- 4315102 (UNIT-V)	
VII	Refer course Clothing Construction-4315102 (UNIT-VI)	
VIII	Refer course Fabric science and its application-4325104 (UNIT-I)	
IX	Refer course Fabric science and its application-4325104 (UNIT-IV)	
X	Refer course Fabric science and its application-4325104 (UNIT-I)	

9. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

	Teaching	Distribution of Theory Marks

Unit No.	Unit Title	Hours	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) Course/topic-based seminars
- b) Internet based assignments
- c) Teacher guided self-learning activities
- d) Course/library/internet/lab based mini-projects etc.

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 on how to address issues on environment and sustainability.

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 is 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) Collect pictures of different types of garments having darts, tucks, pleats, ruffles, trimmings etc. Paste it in your scrap book and try naming it.
- b) Collect pictures of different types of motifs/designs. Paste it in your scrap book and name it.
- c) Collect pictures of different types of stripes, checks and plaids. Classify it and paste it in scrap book.
- d) **Collect buttons of various shapes and materials. Paste it in your scrap book.**

13. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication with place, year and ISBN
1	Shorthand Fashion Sketching	Pratricia L. Rowe	Fairchild Publications, Inc. Newyork-10003 1964. ISBN-13 -9780870050688.
2	Visual Design in Dress	Marian L Devis	Pearson College-1996 ISBN-13-9780131121294.
3	Cutting & Sewing Theory	Gayathri Verma & Kapil Dev	Asian Publishers-2019 ISBN-978-81-7317-245-8
4	Garment Technology for fashion Designers	Gerry Cooklin,	Wiley India Pvt. Ltd.-2008. ISBN-13 9788126515844
5	Garment Manufacturing Technology	Rajkishore Nayak, Rajiv Padhye	Woodhead Publishing-2015 ISBN-13-9781782422327.

14. SOFTWARE/LEARNING WEBSITES

- <https://cbseportal.com/ebook/vocational-books-fashion-design-and-garment-technology>
- <https://bie.tg.nic.in/Pdf/bie.pdf>
- <https://bie.tg.nic.in/Pdf/GarmentTextBookfinal.pdf>
- https://www.usha.com/sites/default/files/sewing_tutorials/indian-garment-design-coursebook.pdf
- <https://www.fashionistasketch.com/fashion-fabric-design/>
- <https://sewguide.com/motifs-in-indian-textiles/>

15. PO-COMPETENCY-CO MAPPING

Semester II	Design Concept and Design Effect (Course Code:4325101)
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Competency & Course Outcomes	POs						
	PO 1 Basic & Discipline specific knowledge	PO 2 Problem Analysis	PO 3 Design/ development of solutions	PO 4 Engineering Tools, Experiment & Testing	PO 5 Engineering practices for society, sustainability & environment	PO 6 Project Management	PO 7 Life- long learning
<u>Competency</u>	Illustrate different types of design effects required for costume design by drawing and sketching.						
<u>Course Outcomes</u>							
CO a) Draw different types of design/print	3	2	2	2	2	2	3
CO b) Create drawings and sketches illustrating different types of fullness techniques, trimmings and fasteners required for fashion design.	3	2	2	2	2	2	3
CO c) Draw various patterns of stripes, checks and plaids.	3	2	2	2	2	2	3
CO d) Draw different types of fabric falls, drapes, textures and patterns.	3	2	2	2	2	2	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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