

## GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)

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

Semester - III

#### CourseTitle: Basic Apparel Construction

(Course Code: 4335104)

| Diploma programme in which this course is offered | Semester in which offered |
|---|---------------------------|
| Computer Aided Costume Designing and Dress Making | Third                     |

#### 1. RATIONALE

This course imparts the knowledge of Basic apparel construction of children and female using drafting and flat pattern techniques. This is a practice-based course and it would require application of most of the knowledge and skills acquired by students in other courses of first and second semester. The skills acquired by this course would help students for preparing garments at par with the industry and for creating advanced pattern design. Thus, it is a key course for garment construction for child and female.

#### 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 pattern for child and female using appropriate blocks.**

#### 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) Prepare upper and lower block for child and female.
- b) Adapt upper and lower block of child and female.
- c) Construct different styles of upper and lower garments for child and female.
- d) Design different styles of upper and lower garments for child and female.

#### 4. TEACHING AND EXAMINATION SCHEME

| Teaching Scheme<br>(In Hours) |   |   | Total Credits<br>(L+T+P/2) | Examination Scheme |     |                 |     |                |
|-------------------------------|---|---|----------------------------|--------------------|-----|-----------------|-----|----------------|
|                               |   |   |                            | Theory Marks       |     | Practical Marks |     | Total<br>Marks |
| L                             | T | P | C                          | CA                 | ESE | CA              | ESE |                |
| 0                             | 0 | 6 | 3                          | 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       | Prepare upper basic block for children (6-8 years) by drafting method.  | 1        | 04*                   |
| 2       | Prepare a top for a Girl (6-8 years).<br>2.1 Adapt child upper basic block to a top for a Girl.<br>2.2 Cut & stitch the adapted garment.                                | 2        | 10*                   |
| 3       | Draft, cut & stitch the skirt for a Girl (6-8 years).   | 1 & 2    | 08*                   |
| 4       | Design a top and a skirt for a Girl (any 3).  | 2        | 04*                   |
| 5       | Prepare a Shirt for a Boy (6-8 years).<br>5.1 Adapt child upper basic block to a shirt for a Boy.<br>5.2 Cut & stitch the adapted garment.                              | 2        | 10*                   |
| 6       | Draft, cut and stitch a short / capri for a Boy (6-8 years).  | 1 & 2    | 08*                   |
| 7       | Design a shirt and a Capri / short for Boy (6-8 years).   | 2        | 04*                   |
| 8       | Prepare the Upper bodice block for female (Front, Back & sleeve).   | 3        | 06*                   |
| 9       | Prepare a top / simple kurta / frock for a female.<br>9.1 Adapt the female upper bodice block to a top / simple kurta / frock.<br>9.2 Cut & stitch the adapted garment. | 4        | 12*                   |
| 10      | Draft, cut and stitch female lower garment (any one)<br>• Skirt<br>• Salwar<br>• Chudidar   | 3 & 4    | 10*                   |
| 11      | Design a Kurta with Salwar / Chudidar / Pant for female (any 3).  | 4        | 04*                   |
| 12      | Design a top with skirt / trouser for female (any 3).   | 4        | 04*                   |
|         | <b>Minimum Practical Hours</b>  |          | <b>84</b>             |

### 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            | Planning the process for preparing the garment/block.         | 20             |
| 2            | Preparing the garment/block/design as per given instructions. | 50             |
| 3            | Finishing of the garment/block/design.                        | 20             |
| 4            | Presentation of the garment/block/design.                     | 10             |
| <b>Total</b> |   | <b>100</b>     |

## 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 practical's in all institutions across the state.

| Sr. No. | Equipment Name with Broad Specifications | PrO. No.          |
|---------|--|-------------------|
| 1.      | Half Shuttle Sewing Machine              | 2, 3, 5, 6, 9, 10 |
| 2.      | Full Shuttle Sewing Machine              | 2, 3, 5, 6, 9, 10 |

## 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 fulfill the development of this course competency.

- a) Work as a leader/a team member.
- b) Follow safety practices while using instruments and tools.
- c) Follow ethical practices.
- d) Maintain tools and instruments.

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 1<sup>st</sup> year
- ii. 'Organization Level' in 2<sup>nd</sup> year.
- iii. 'Characterization Level' in 3<sup>rd</sup> 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)<br>(4to6 UOs at different levels)   | Topics and Sub-topics   |
|---|---|---|
| Unit– I<br><br>Drafting of<br>the Child's<br>Bodice block | 1a. Draft the upper basic block for the children.<br>1b. Draft the skirt block for a girl child.<br>1c. Draft the shorts/capri for a boy child. | 1.1 Draft the upper basic block for children (6 - 8 years).<br>1.2 Create a paper pattern of the Skirt (for a girl) and the Shorts/Capri (for a boy). |

|  |   |  |
|--|---|--|
| Unit– II<br>Adaptation of Child's upper and lower block.   | 2a. Develop different styles of upper garments for children<br>2b. Develop different styles of lower garments for children.<br>2c. Design different styles of upper and lower garment for children. | 2.1 Adapt the upper basic block to a top for a girl child.<br>2.2 Prepare a top for a girl child.<br>2.3 Adapt the upper basic block to a shirt for a boy child.<br>2.4 Prepare a shirt for a boy child.<br>2.5 Prepare a skirt for a girl child.<br>2.6 Prepare a shorts/capri for a girl child.<br>2.7 Design various upper and lower garments for children. |
| Unit– III<br>Drafting of upper and lower block for female. | 3a. Draft the upper basic blocks (front, back & sleeve) for female.<br>3b. Draft the lower garment block (salwar / chudidar / skirt) for female.  | 3.1 Draft the upper basic blocks (front, back & sleeve) for the female as per the given measurement.<br>3.2 Create a paper pattern of the female lower garment (skirt/ salwar/ chudidar) as per the requirement.   |
| Unit– IV<br>Adaptation of female upper and lower block.    | 4a. Develop the basic styles of upper garment for female.<br>4b. Develop the lower garment for female.<br>4c. Design different styles of upper and lower garment for female.                        | 4.1 Adapt the upper basic block of female to a top/kurta.<br>4.2 Prepare a top/kurta for a female.<br>4.3 Prepare a lower garment for female.<br>4.4 Design various upper and lower garments for female.   |

### 9. SUGGESTED SPECIFICATION TABLE FOR QUESTIONPAPER 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) Assign internet-based assignments.
- b) Give seminar on types and varieties of Children/Female garment.
- c) Undertake market survey on various types of female garment.

d) Assign teacher guided self-learning activities.

### 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.
- g) Make students understand the relevant topic using animation, video and presentations.

### 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 micro project 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) **Girl child party wear:** Design 10 party wear for a girl child.
- b) **Boy child party wear:** Design 10 party wear for a boy child.
- c) **Female party wear:** Collect Pictures of female party wear garments.
- d) **Female fusion wear:** Design 05 fusion wear garment for female.
- e) **Fabric Material:** Collect suitable fabric sample for Children wear.

**13. SUGGESTED LEARNING RESOURCES**

| Sr. No. | Title of Book  | Author                   | Publication with place, year and ISBN  |
|---------|--|--------------------------|--|
| 1       | Metric Pattern Cutting for Children's Wear and baby wear | Winifred Aldrich         | Wiley-Blackwell<br>ISBN: 9781405182928 (July 2009)                                   |
| 2       | Pattern Grading for Women's Clothes                      | Gerry Cooklin            | John Wiley & Sons Ltd<br>ISBN-10: 0632022957 (April 1990)<br>ISBN-13: 978-0632022953 |
| 3       | Metric Pattern Cutting                                   | Winifred Aldrich         | John Wiley and Sons Ltd<br>ISBN-10: 0632036125 (1994)<br>ISBN-13: 978-0632036127     |
| 4       | Pattern making for Fashion design                        | Armstrong, Helen Joseph  | Prentice Hall<br>ISBN 10: 0136069347 (2009)<br>ISBN 13: 9780136069348                |
| 5       | Pattern Design for Children's clothes                    | Gloria Mortimer-Dunn     | B T Batsford Ltd<br>ISBN-10 : 0713478748(July 1996)<br>ISBN-13 : 978-0713478747      |
| 6       | Children's wear Design                                   | Hilde Jafee<br>Rosa Rosa | Fair Child Books<br>ISBN: 0870057065 (January 1990)<br>ISBN13: 9780870057069         |

**14. SOFTWARE/LEARNING WEBSITES**

- [https://books.google.co.in/books/about/Patternmaking\\_For\\_Fashion\\_Design\\_And\\_Dvd.html?id=2fwcuCgTjtAC&printsec=frontcover&source=kp\\_read\\_button&hl=en&newbks\\_redir=1&redir\\_esc=y](https://books.google.co.in/books/about/Patternmaking_For_Fashion_Design_And_Dvd.html?id=2fwcuCgTjtAC&printsec=frontcover&source=kp_read_button&hl=en&newbks_redir=1&redir_esc=y)
- <https://en.fashionfreaks.se/patterns-and-accessories/patterns-jackets-pants-skirt/womens-jackets/>
- <https://textilelearner.net/womens-shirt-drafting-procedure/>
- <https://www.theshapesoffabric.com/2019/02/23/how-to-draft-the-basic-skirt-pattern/>
- <https://inthefolds.com/blog/2016/2/22/how-to-draft-a-bodice-block>
- [Basics of Pattern Making & Pattern Making Basics for Garments - Fibre2Fashion](#)

**15. PO-COMPETENCY-CO MAPPING**

| Semester III                 | Basic Apparel Construction (Course Code:4335104) |                          |                                      |  |   |                            |                            |
|------------------------------|--|--------------------------|--------------------------------------|--|---|----------------------------|----------------------------|
|                              | POs  |                          |                                      |  |   |                            |                            |
| Competency & Course Outcomes | PO 1<br>Basic & Discipline specific knowledge    | PO 2<br>Problem Analysis | PO 3 Design/development of solutions | PO 4<br>Engineering Tools, Experimentation & Testing | PO 5<br>Engineering practices for society, sustainability & environment | PO 6<br>Project Management | PO 7<br>Life-long learning |

| <b>Competency</b>  | <b>Create pattern for child and female using appropriate blocks.</b> |   |   |   |   |   |   |
|--|--|---|---|---|---|---|---|
| <b>Course Outcomes</b>   |  |   |   |   |   |   |   |
| CO a) Prepare upper and lower block for child and female                           | 3  | 3 | 3 | 3 | 2 | 3 | 3 |
| CO b) Adapt upper and lower block for child and female                             | 3  | 3 | 3 | 3 | 2 | 3 | 3 |
| CO c) Construct different styles of upper and lower garments for child and female. | 3  | 3 | 3 | 3 | 2 | 3 | 3 |
| CO d) Design different styles of upper and lower garments for child and female.    | 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                       |
|---------|---|-----------------|-------------|-----------------------------|
| 1       | Dr. F. V. Kugashiya<br>HOD in<br>CACD&DM    | BPTI, Bhavnagar | 9825697874  | farjana.kugashiya@gmail.com |
| 2       | Ms. S. H. Bhatt<br>I/C HOD in<br>CACD&DM    | GGP, Ahmedabad  | 9898068580  | shbhatt99@gmail.com         |
| 3       | Mrs. U. B. Patel<br>Lecturer in<br>CACD&DM  | SKJP, Bharuch   | 9825343953  | ubpatel74@gmail.com         |
| 4       | Dr. P. A. Acharya<br>Lecturer in<br>CACD&DM | BPTI, Bhavnagar | 9427503783  | pallaviacharrya@gmail.com   |