

GUJARAT TECHNOLOGICAL UNIVERSITY

COURSE NAME : COMPUTER APPLICATION - II

1. RATIONALE:

This course will give knowledge of the software that are used for designing. It is essential for the students to know & use such software. This course will form a base for making designs on computer.

2. SCHEME OF TEACHING:

TOPIC NO.	NAME OF TOPIC	Lecture Hour	Practical Hour	Total Hour
1	Application to Corel-Draw	8	32	40
2	Application to Photoshop	6	24	30
TOTAL		14	56	70

3. OBJECTIVES:

1. To make students aware of software such as Corel-Draw, Photoshop.

4. CONTENT OUTLINE:

1. INTRODUCTION TO COREL-DRAW.

- 1.1 Meaning & its use.
- 1.2 General introduction to drawing editor.
- 1.3 Corel-draw menu bar.
- 1.4 Corel-draw standard tool bar.
- 1.5 Corel-draw tool Box.

2. INTRODUCTION TO PHOTOSHOP & ITS USE.

- 2.1 General introduction to drawing editor.
- 2.2 Photoshop menu Bar.
- 2.3 Photoshop toolbox.
- 2.4 Photoshop pallets.

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5. LABORATORY EXPERIENCE:

1. Understand & use Corel-draw menu bar.
2. Use of Corel-draw standard tool bar & tool box.
3. Understand Photoshop menu Bar.
4. Use of Photoshop tool Box & Pallets.
5. Preparation of eight head theory plan in AutoCAD.
6. Import of human figure from AutoCAD.
7. Garment application on human figure by using Corel-draw and Photoshop software. (Minimum – 5 design)
8. To know and use current software.

6. TERM WORK :

Prepare a journal/file for submission as a part of curriculum.

7. REFERENCES :

- | | | |
|---|----------------------|------------------------------------------------|
| 1 | Computer application | -(By Atul Prakashan.English & Gujarati version |
| 2 | AutoCAD 2000 | - Reference manual. |
| 3 | Corel-draw | - |
| 4 | Photoshop | - |

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CORSE NAME : FASHION MODEL DRAWING

1. RATIONALE:

The course forms the basis for drawing human figures. It emphasize the basic silhouettes of the figures. The knowledge of different types figures enables the designers to design costumes so figure types are explained and the application of principles and elements of design will be useful to the students in garment designing.

2. SCHEME OF TEACHING :

Topic no	Name of Topic	Lecture Hour	Practical Hour	Total Hour
1	Relationship between two dimension-shapes & three dimension forms.	2	4	6
2	Application of elements & principles of designs in clothing.	2	10	12
3	Eight head theory.	6	12	18
4	Model Drawing.	4	24	28
5	Silhouette and its variations.	6	6	12
6	Pattern design flattering different types of figures.	8	-	8
Total		28	56	84

Note :- Computer period are allotted for practical are 28 per term.

3. OBJECTIVES :

1. To understand relationship between shapes & forms.
2. To know different types of silhouette & its variations.
3. To identify different figure problems & overcome to its solution.
4. To develop skill in drawing various parts of body and body as a whole.
5. To understand Eight head theory plan.
6. To apply elements & principles of designs in clothing.

4. CONTENT OUTLINE :

1. **RELATIONSHIP BETWEEN TWO DIMENSIONS SHAPES & THREE DIMENSION FORMS.**
2. **TWO & THREE DIMENSIONS IN FIGURES & FASHIONS.**
3. **APPLICATION OF ELEMENTS & PRINCIPLES OF DESIGNS IN CLOTHING.**
 - 3.1 Shape and form in dress.
 - 3.2 Visual effects in dress.
 - 3.3 Repetition and the elements as applied to the dress.
 - 3.4 Gradation & the elements in the dress.
 - 3.5 Transition & the elements in the dress.

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- 3.6 Radiation & the elements in the dress.
- 3.7 Rhythm & the elements in the dress.
- 3.8 Emphasis & the elements in the dress.
- 3.9 Balance & the elements in the dress.

4. EIGHT HEAD THEORY.

- 4.1 Male
- 4.2 Female
- 4.3 Child

5 SILHOUTTE & ITS VARIATIONS.

- 5.1 Definition & importance of silhoutte
- 5.2 Bustle, Angular, Tubular & flared silhoutte with variations.

6 PATTERN DESIGN FLATTERING DIFFERENT TYPES OF FIGURES.

- 6.1 The Stout figure.
- 6.2 The thin figure
- 6.3 Narrow shoulder
- 6.4 Broad shoulder
- 6.5 Round figure
- 6.6 Large Bust
- 6.7 Flat chest
- 6.8 Large Hip
- 6.9 Large waist & Hips
- 6.10 Large abdomen
- 6.11 Long Waist, slender figure
- 6.12 Short Waist
- 6.13 Sway Back
- 6.14 Long Neck
- 6.15 Short or thick
- 6.16 Large face
- 6.17 Small face
- 6.18 Square or broad face
- 6.19 Round face
- 6.20 Narrow Pointed face
- 6.21 Retrouse Nose
- 6.22 Prominent Nose
- 6.23 Prominent Chin & Jaw
- 6.24 Receding Chin & Small Jaw
- 6.25 Prominent forehead
- 6.26 Low forehead
- 6.27 Sharp angular feature
- 6.28 Large features
- 6.29 Glasses

5. LABORATORY EXPERIENCES :

- 1. Preparation of a sheet showing dominant body form of child.
- 2. Preparation of a sheet showing Dominant Geometric form of male.
- 3. Preparation of sheet showing Dominant Geometric form of female.
- 4. Incorporation of flat two dimensional geometrical shapes in dress.

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- 4.1 Square
 - 4.2 Rectangle
 - 4.3 Triangle
 - 4.4 Trapezoid
 - 4.5 Circle
 - 4.6 Diamond
 - 4.7 Hexagon
 - 4.8 Teardrop
 - 4.9 Oval
 - 4.10 Ogive
 - 4.11 Marquis
 - 4.12 Free form
- 5 Preparation of sheet showing Incorporation of three dimensional forms in dress enveloping the figure.
- 5.1 Cube
 - 5.2 Sphere
 - 5.3 Tube or Cylinder
 - 5.4 Ring
 - 5.5 Cone
 - 5.6 Pyramid
 - 5.7 Bell or dome
 - 5.8 Egg or Ovoid
 - 5.9 Lantern or barrel
 - 5.10 Hourglass
 - 5.11 Box
 - 5.12 Trumpet
- 6 Preparation of sheet showing Co-ordination of three dimension forms and two dimension shapes with each other and with the human figure.
- 6.1 Forms : Bodice : sphere
Sleeve : Sphere
Skirt :
Sphere
Form :
Collar
-Ring
-Sleeves
- Lantern
Bodice
- Cone
Skirt
- Dome
Skirt
- tube
and
sphere
Forms : Bodice – inverted
cone skirt – Cone Cuff –
Ring Sleeve – Cylinder
 - 6.2 Flat shapes : Circle
 - 6.3 Designing of a dress using shapes.
Flat shapes : Triangle

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Tear drop
Circle
Square
Diamond
Paisley
Rectangle
Free

form Flat shapes :

Trapezoid

Rectangle

Triangle

Curvilinear free forms.

- 6.4 Resulting : Repetitive
Sameness combination
unrelated to figure.
- 6.5 Resulting combination : Multiplicity of shapes and forms unrelated to each other or to body forms.
- 6.6 Resulting Combination : Repetition with variation related to each other and to body forms.

7 Preparation of the sheet showing following principles. (2 Sheets in every sub-topics)

- 7.1 Repetition and the elements as applied to dress.
- 7.2 Gradation and the elements as applied to dress.
- 7.3 Transition and the elements as applied to dress.
- 7.4 Radiation and the elements as applied to dress.
- 7.5 Rhythm and the elements as applied to dress.
- 7.6 Emphasis and the elements as applied to dress.
- 7.8 Balance and the elements as applied to dress.

8 Eight head theory of child.

9 Eight head theory of male.

10 Eight head theory of female.

11 Drawing of Models

11.1 Drawing of eyes

11.2 Drawing of Hands

11.3 Drawing of face

11.4 Drawing of lips

11.5 Drawing of nose

11.6 Drawing of legs.

11.7 Drawing of hair – style

11.8 Complete drawing of Child in front, back and side view. (figure proportions 1- 10 years)

11.9 Complete drawing of female in front, back and side view.

11.10 Complete drawing of male in front, back and side view.

11.11 All silhouette and its variations as per the theory syllabus topic No-4

6. TERM WORK :

Prepare a Journal/file for submission as a part of curriculum.

7. REFERENCES :

- 1. Visual Design – Marian L. Davis.

GUJARAT TECHNOLOGICAL UNIVERSITY
COURSE NAME : THE TECHNOLOGY OF CLOTHING MANUFACTURING – I

1. RATIONALE:

A clear need had been perceived for information on clothing manufacturing technology, related to current practice in the clothing industry. This course will provide guidance for garment manufacturing techniques for industry. It is essential to learn about marker planning, spreading of the fabric, cutting of the fabric its objectives, methods of cutting, method of spreading etc. This course is useful for understanding garment-manufacturing technology.

2. SCHEME OF TEACHING:

Topic No.	Name of Topic	Lecture Hour	Practical Hour	Total Hours
1	Marker planning	12	50	62
2	Spreading of fabric	8	2	10
3	Cutting of the fabric	8	4	12
TOTAL		28	56	84

Note:- Computer period allotted for practical are 28 per term. 4. 3.

3. OBJECTIVES:

1. To enable the students to understand marker planning and it's meaning.
2. To enable the students to give knowledge of spreading of the fabric.
3. To enable students to gain knowledge of cutting of the fabric by various methods used in industry.

4. CONTENT OUTLINE:

1. MARKER PLANNING:

- 1.1 Marker and its meaning.
- 1.2 The planning, drawing and reproduction of the marker.
- 1.3 The requirements of marker planning.
- 1.4 Efficiency of marker planning.
- 1.5 Method of marker planning.Lay
- 1.6 Step – Lay

2. SPREADING OF THE FABRIC:

- 2.1 The spreading of the fabric to form a lay.
- 2.2 The requirements of spreading process.
- 2.3 Methods of spreading.
 - (a) Spreading by hand.
 - (b) Spreading using a traveling machine.
- 2.4 The nature of fabric packages.
 - (a) Open fabric – rolled.
 - (b) Tubular knitted fabric – rolled.

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- (c) Folded fabric – rolled.
- (d) Folded fabric – cuttled.
- (e) Velvet hanging.

3. CUTTING OF THE FABRIC:

3.1 The objectives of Cutting.

3.2 Methods of Cutting.

- (a) Hand Shears.
- (b) Straight Knife.
- (c) Band Knife.
- (d) Round Knife.
- (e) Notchers.
- (f) Drills & thread markers.
- (g) Computer Controlled Cutting knives.
- (h) Die Cutting
- (i) Laser Cutting.
- (j) Plasma Cutting.
- (k) Water Jet Cutting
- (l) Ultrasonic Cutting.

5. LABORATORY EXPERIENCE:

1. To Calculate the Efficiency of marker planning.
2. To prepare the drawing of the lay.
3. To prepare the drawing of the step - lay.
4. To prepare the marker planning of Shakespeare shirt in the cloth width size 36" & 45" by Computer (size of the shirt will be 30-32", 34-38" and 40-42").
 - (a) In plain material.
 - (b) In lining material.
 - (c) In even checks.
 - (d) In uneven checks.
5. To prepare the marker planning of Trouser in the cloth width size 54" & 60" by computer (Size of the pant will be 28", 34" & 38").
6. To prepare the marker planning of skirt in one – way design.
 - (a) Print – wise.
 - (b) Fabric – Structure wise (Napped or Velvet)
7. Drawing of types of spread
 - (a) Alternate plies in different direction; symmetrical pattern pieces; fabric stable face to face.
 - (b) Alternate plies in different direction; fabric stable face up; turnable spreader.
 - (c) All plies in same direction; fabric stable face up.
 - (d) All plies in the same directions; symmetrical pattern pieces; fabric Stable face to face; turnable spreader.
8. Preparation of a sheet showing following equipment.
 1. Spreading by traveling machine.
 2. Hand shears.

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3. Straight knife.
4. Round knife.
5. Band knife.
6. Notchers.
7. Drills and thread markers.
8. Computer controlled Cutting knives.

6. TERM WORK :

This shall be done on the basis of Laboratory Experiences and duly submitted on journal.

** Marker planning and layout should be taught using standard blocks as a teaching aid drafting is not be taught. Blocks should be prepared in the department using acrylic sheets or plastic sheets. ** Visit to industrial unit as per the requirement.

7. REFERENCE :

1. The technology of Clothing Manufacturing. -Harold Carr and Barbara Latham.

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CORSE NAME : HAND AND INDIAN EMBROIDERY

1. RATIONALE

This course will provide basic knowledge of embroidery stitches, tools and equipments required for embroidery and about traditional embroidery of India. It is necessary to learn basic embroidery stitches for enhancing the beauty of garments. This course will provide base to make garments aesthetic beautiful.

2. SCHEME OF TEACHING :

Topic No.	Name of Topic	Lecturer Hour	Practical Hour	Total Hour
1.	Origin, Development & importance of embroidery.	1	-	01
2.	Tools & equipments required for Hand embroidery.	2	-	02
3.	Study of basic stitches.	4	24	28
4.	Study of Indian embroidery.	7	32	39
Total		14	56	70

3. OBJECTIVES :

1. To gain knowledge and to develop skill in making embroidery stitches.
2. To identify various stitches and traditional embroidery.

4. CONTENT OUTLINE :

1. Origin, development and importance of embroidery.
2. Tools and equipment required for hand embroidery.
 - 2.1 Selection, use and maintenance of tools and embroidery.
 - 2.2 Various threads used in embroidery.
 - 2.3 Accessories used in embroidery.
3. STUDY OF BASIC STITCHES.
 - 4.1 Back stitch
 - 4.2 Blanket stitch
 - 4.3 Chain stitch
 - 4.4 Laid and Couching
 - 4.5 Cross stitch
 - 4.6 Feather stitch
 - 4.7 Satin stitch
 - 4.8 Lazy –daisy stitch
 - 4.9 Bullion and French knot
 - 4.10 Fly stitch
 - 4.11 Long and short stitch
4. STUDY OF INDIAN EMBROIDERY.
 - 4.12 Kashmiri Kashida

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- 4.13 Bagh and Phulkari of Punjab
- 4.14 Chamba Rumals
- 4.15 Kashida, Sujani and appliqué of Bihar
- 4.16 Bengal Kantha
- 4.17 Murshidabad and Dacca embroidery
- 4.18 Manipuri embroidery
- 4.19 Rajasthan embroidery
- 4.20 Kasuti of Maharashtra and Mysore
- 4.21 Bead embroidery
- 4.22 Tribal embroidery
- 4.23 Religious embroidery
- 4.24 Gold and silver embroidery(zardosi)
- 4.25 Chikankari of Luchnow(Uttar Pradesh)

5. LABORATORY EXPERIENCES :

1. Prepare samples of all basic stitches on 8”/8” fabric. The size of the design will be 4”/4”.
2. Prepare samples on following Indian embroidery on 8”/8” fabric. The size of the design will be 4”/4”

- 2.1 Kashmiri
- 2.2 Phulkari
- 2.3 Chamba
- 2.4 Chikankari
- 2.5 Kantha
- 2.6 Manipuri
- 2.7 Kutch
- 2.8 Kathiawari
- 2.9 Gold and Silver embroidery (Zardosi)

*****Note** : A visit should be arrange to the museum and prepare visit reports.

6. TERM WORK :

Prepare a Journal/file for submission as a part of curriculum.

7. REFERENCE :

1. Textiles and embroidery of India - Mark Publications, 34-38 Bank street, Bombay, India.
2. Sushobhan - Jaya Snehal Shah. ham.
3. Indian Embroidery - Savitri Pandit
4. A stitch in Gujarat embroidery - The Gujarat state Handicraft & Handloom Development Corporation Ltd.
5. Bhartiya Kashidakari

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CORSE NAME : CLOTHING CONSTRUCTION - II

1. RATIONALE:

This course imparts the knowledge of advanced pattern designing using flat pattern technique and draping technique. It is useful for the students for pattern advanced design and fashion designing. This knowledge is useful for preparing fashioned garments at par with the industry.

2. SCHEME OF TEACHING :

Topic No.	Name of Topic	Lecture Hour	Practical Hour	Total Hour
1.	Different types of Blocks, its presentation and importance of blocks.	10	12	22
2.	Techniques of pattern designing -: a. Flat pattern method b. Draping method	10	40	50
3.	Sleeves	3	12	15
4.	Collars	3	10	13
5.	Skirts	2	10	12
Total		28	84	112

3. OBJECTIVES :

1. To make the students aware of various types of blocks.
2. To make the students aware of various types of pattern designing techniques.
3. To prepare the students for designing fashioned garments.

4. CONTENT OUTLINE :

1. TYPES OF BLOCKS.

1.1 Explain following types of block.

- 1.1.1 standard block
- 1.1.2 simplified block
- 1.1.3 tailoring block
- 1.1.4 trade block
- 1.1.5 primary block
- 1.1.6 secondary block.

1.2 Presentation of blocks.

1.3 Importance of blocks.

2. TECHNIQUES OF PATTERN DESIGNING.

2.1 Explain methods of pattern designing

- 2.1.1 flat pattern method
- 2.1.2 Draping method.

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- 2.2 Principles of flat pattern method, its advantages and disadvantages.
- 2.3 Methods of flat pattern
 - 2.3.1 Pivot method
 - 2.3.2 Slash method
- 2.4 Principles of draping, its advantages and disadvantages.
- 2.5 Preparation of dress-form (laboratory method)
- 2.6 Techniques of designing garments-through draping method.

3 SLEEVE.

- 3.1 Explain following types of sleeves.
 - 3.1.1 Set in sleeves
 - 3.1.2 Non set in sleeves.
- 3.2 Varieties of set-in-sleeves.
- 3.3 Varieties of non set-in-sleeves.

4 COLLARS.

- 4.1 Explain following types of Collars.
 - 4.1.1 Flat Collars
 - 4.1.2 Raised Collars.
- 4.2 Varieties of flat collars
- 4.3 Varieties of raised collars.
- 4.4 Varieties in neck-lines without Collars.

5 SKIRTS.

- 5.1 All variations of skirts.

5. LABORATORY EXPERIENCES :

- 1. Preparation of upper basic block.
- 2. Preparation of basic block of sleeve.
- 3. Preparation of lower block.
- 4. One, two & three dart shifting by pivot and slash method. (Total samples-6)
- 5. Combining two darts and three darts by pivot and slash method. (Total samples 6) slash
- 6. Dividing one dart, two dart, and three dart by pivot and slash method. (Total samples 6) slash
- 7. Combining of two darts and three darts. (Total samples 6)
- 8. Dart combining and converting into seams, and yoke. (Total samples 6) gathers
- 9. Designing of sleeves 10 drawings
- 10. Preparation of set in sleeves through slash (Any 5+1 fancy sleeve method as well as drafting or adaptation from of current fashion) basic block.
 - a. Gathers at top
 - b. Gathers at bottom
 - c. Gathers at top & bottom
 - d. Petal

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- e. Bell
11. Preparation of non-set in sleeves through adaptation from basic block Any 5
- a. Kimono
- b. Raglan pointed
- c. Raglan with round base
- d. Square
- e. Magya
12. Designing of flat and raised collars 10 drawings
13. Preparation of flat collars Any 5
- a. Peter-pan
- b. Sailors collar
- c. Cape collar
- d. Cape collar with scallops at bottom
- e. Peter pan with lace at bottom
14. Preparation of raised collars. Any 5
- a. Chinese collar
- b. Shakespeare collar
- c. Roll collar
- d. Shawl collar
- e. Polo collar
15. Designing of skirts 10 drawings
16. Preparation of skirts through slash method and drafting method. Any 8
- a. Skirt with fullness at top
- b. Skirt with fullness at bottom
- c. Skirt with fullness at top & bottom
- d. Skirt with yoke & belt
- e. Skirt with double yoke without belt
- f. Half umbrella
- g. Full umbrella
17. Preparation of blouse by draping method.
18. Preparation of blouse using pleats by draping method.
19. Preparation of blouse using tucks by draping method.
20. Preparation of skirt using draping method
21. Preparation of flat collar and raised collar by draping method Any 2

***Note : All samples of above mentioned paper work is to be done on $\frac{1}{4}$ th scale on fabric.

6. TERM WORK :

Prepare a Journal/file for submission as a part of curriculum.

7. REFERENCE :

- | | | |
|----------------------------|---|-------------------|
| 1. Flat Pattern Design | - | Allyne Bane |
| 2. Dress Pattern Designing | - | Natalie Bray ham. |
| 3. Making a skirt | - | Esther Pillnick |
| 4. Metric Pattern Cutting | - | Winifred Aldrich |