



## Chapter 2

### *Basic Pattern Development*

#### **Objective**

The objective of the chapter is to provide students with a wide perspective on the role of pattern development in fashion designing. It introduces students to the world of designing through patterns and provides students with basic knowledge of pattern development which is essential for further application in the industry to achieve the following:

1. To demonstrate understanding of the definitions of pattern making
2. To demonstrate comprehension of the subject to explain the elements and principles of pattern development
3. To demonstrate capacity to develop basic blocks for bodice, sleeve, skirt and collar
4. To demonstrate understanding of the principles of fit and achieve good fit in patterns through test fits.

#### **Learning Outcome**

After finishing the course, the students shall be able to do the following:

1. To demonstrate understanding of the basic skills of pattern making
2. To demonstrate understanding and appreciation of the concept of fit and balance
3. Ability to develop basic blocks from measurement charts
4. To test fit and correct patterns for basic styles
5. To develop patterns for simple designs using basic slopers and blocks

#### **Teaching Pedagogy**

1. Illustrated class lectures and practical demonstrations
2. Visual references like magazines, books or actual patterns or garment samples
3. Class-room quiz
4. Presentations both by faculty and students followed by discussions in class
5. Review and feedback on assignments

#### **Assessment And Review of Learning**

Each unit culminates in objective type and review questions for which the answer keys are included in this manual. Teachers can also plan the same questions in form of a quiz. Additional



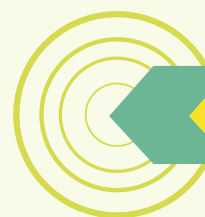


activities may be planned to inculcate interest in the subject and motivate students to go and source additional information from market and web.

1. Written test to assess and evaluate knowledge and understanding
2. Practical assignments to assess and evaluate application and skills
3. Presentations to assess and evaluate content and presentation skills

## References

1. Rasband, J. *Fabulous Fit*. New York: Fairchild Publications 1994.
2. Kunick, P. *Modern Sizing and Pattern Making Women's and Children's Garments*. London: Philip Kunik Publications.
3. Aldrich, W. (1997). *Metric Pattern Cutting for Womenswear*. Oxford: Blackwell Science.
4. Knowles, L. A. (2006). *The Practical Guide to Patternmaking for Fashion Designers*. New York, New York, USA: Fairchild Publications
5. Stringer, P. *Pattern Making*: Fairchild Publications 2004
6. Armstrong, H. J. *Pattern Making for Fashion Design*, Fairchild Publications 1986





**Section 2.1** aims at inculcating the understanding of pattern making in basic terms and pattern development for designing and style development.

## 2.1 Pattern Making

Section 2.1.1 Introduction: Pattern Development & its origin: deals with brief introduction to pattern making and history of pattern development, provides an insight of how and why it developed.

Section 2.1.2 Pattern Making: explains concept of pattern development and various methods of pattern development, how and why of pattern development

Section 2.1.3 Terminology: develops vocabulary of pattern making, their meaning and symbols.

Section 2.1.4 Symbols and abbreviations: introduces symbols and abbreviation used in universal language patterns

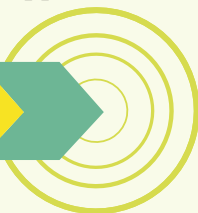
### Activity

1. Collect pictures of womenswear garments. Create a folder or style file and identify the kind of darts used in the garment. This will become a guide for you on various styles.

**Teachers role** *Students should be asked to make design folders (which can be a plastic file with transparent pockets to put pictures) and label them. This creates interest in the subject and enhances learning when they label them. Refer to pictures and designs in the folder to explain terminology and encourage discussions.*

## 2. Fill in the blanks

- a. A pattern can be cut by Draping method and Flat Pattern making method.
- b. Pattern is a blueprint of a garment.
- c. The author of the book 'Modern Sizing and Pattern Making for Womens and Childrens Garments' is Philip Kunick
- d. The dart is a triangular wedge that gives 3D to the flat piece of fabric.
- e. Waist dart is half an inch away from the bust and side seam dart is one inch away.
- f. Balance refers to proportion and hang in a garment.
- g. Muslin is used for test-fit a pattern and it is also called a Toile.
- h. Pattern is placed lengthwise on the straight grain of the fabric.
- i. Sloper is a term given to a basic set of pattern piece used to make patterns of any style.
- j. Draping method is the oldest pattern making method and is regarded as a creative approach.





**Section 2.2** aims at inculcating the understanding of measurements.

**Section 2.2.1: How to take Measurements:** introduces students to various body parts and positions and methods of measuring a dress form. Also the points to be kept in mind while measuring various parts of the body

**Section 2.2.2 Standard Measurement chart for bodice & skirt:** gives a standard measurement chart for womenswear for developing skirt and bodice, these measurements include necessary ease.

Section 2.2.3 Sizes and Measurements: explains the concept of sizing and its relationship with measurements.

## Exercise – A

1. Measure a dress form and a body Note the difference in the two measuring methods you need to use.

**Teachers role** *Students should be made familiar with body contours and encouraged to explore the hollows and curves of a body. Since the students may not be able to explore a human body they should be made familiar with a dress form. Make them measure each other and a dress form and explain the difference in measuring the two.*

## 2. Fill in the blanks

- a. Center front is the line that divides the front body in two parts.
- b. Ankle should be measured around the ankle bone.
- c. Correct sleeve length is taken by measuring over a bent elbow.
- d. Bodice length is measured by measuring from neck point to apex and waist by placing a hand under bust.
- e. Crotch depth on a body is measured by making the person sit on a flat surface and it is measured from waistline to surface.
- f. Apex is measured by taking the measurement from shoulder neck point to the apex point.
- g. Distance between the apex and center front is measured by dividing the distance between two points in half.
- h. Shoulder blade level is measured at 1/4th of center back.

## Exercise – B

1. Go to the market and check various womenswear brands what are the different sizes you can identify. Try out garments in different styles and brands. Do you fit into the same size of different brands or is there a difference.



**Teachers role** *Students should be asked to make presentation in a group of four to five students each for this survey and encourage group discussions.*

## 2. Fill in the blanks

- Standard measurements are average in a size chart.
- Country that has the most elaborate sizing system is USA.
- Sizing systems are developed by the government or standardization organization for a country.
- The standard sizes for the country are established by measuring a large cross section of the population.
- In UK sizing system was established by British standards for the clothing Industry.
- All garments manufacturers in UK market adhere to the BS3666.
- The size is suffixed with S to denote short and T for a Tall person.
- Countries have different sizes and standards.
- Two women with equal hip girth can have a difference of 12" in their bust measurement.
- Generally sizing systems are based on bust measurements for women.

**Section 2.3** aims at inculcating the understanding of tools and equipment used for pattern development.

**Section 2.3.1 Tools & equipment:** introduces tools and equipment used for pattern making

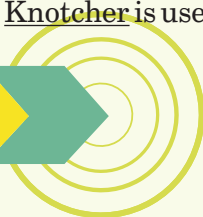
## Exercise

- Go to the library and check books on pattern making and see the different kinds of pattern making tools you can identify. Try to find the tools on internet also. In your scrap book please give uses of various tools

**Teachers role** *Students should be asked to collect pictures and taught the use and correct method of storing and holding of these tools.*

## 2. Fill in the blanks

- Grading ruler is used for drawing perfect parallel and perpendicular lines in making a pattern.
- Hip curve is used for drawing the side seam in a skirt pattern.
- Tracing Wheel is used for marking a seam line on a pattern.
- The pattern is made on pattern paper and test fitted on muslin.
- Knotcher is used for marking notches on pattern.





**Section 2.4** aims at inculcating the understanding of the role and principles of garment fitting.

## 2.4 Fit

2.4.1 Garment Fitting: covers the principles of Fit, basic elements of garment fit- grain, set, ease, balance, line and proportion and defines a well fitted garment.

2.4.2 Evaluating fit: describes good fit and fitting issues on crucial and key problem areas of different parts of human body, co-relation of body movement and fit.

2.4.3 Need to fit: specifies the need for fitting and various stages of fit

2.4.4 Methods of fit: elaborates on two methods of fitting, strengths and weakness of each method and use of each for fitting done on at particular stage in garmenting.

## Exercise

1. Check your own wardrobe. What are the various fit issues you can identify. Try out garments and see if you can identify methods of correcting fit.

**Teachers role** *Students should be made familiar with fit issues in the garment and encouraged to discuss the possible problems of a body shape and posture. Also encourage through group discussions, probable solutions to the problem-whether the problem is due to excess or lack of ease, or body shape or posture and discuss the solutions. Since the students may not be able to rectify all problems they should be encouraged to make muslin of at least one pattern correction.*

2. Collect pictures of various figure types from newspaper and magazines

**Teachers role** *Students should be asked to add these to the design folder made earlier. Refer to these pictures to explain terminology and encourage discussions.*

## 3. Fill in the blanks

- a. Fitting is like sculpting it creates a 3D form.
- b. Five elements of fit are grain, line, balance, ease & set.
- c. Ease is of two **kinds**, i.e. fit & design ease.
- d. Balance occurs when garment is in equilibrium.
- e. The garment is called off grain if it is not cut on the straight grain of the fabric and it would not fit well.
- f. The side seam of the garment should hang straight on the center of the side seam.
- g. There are two methods of evaluating the fit of the garment.
- h. Pins should be placed perpendicular to the seam line, as there is no pressure of strain or pull on the fabric.





- i. Check the test-fit muslin and make corrections till completely satisfied, make all the required corrections and transfer on the pattern.
- j. Horizontal pulls in a garment indicate that the garment is tight and vertical folds indicate that it is loose.

**Section 2.5** aims at explaining the process of block development.

**2.5.1 Basic Bodice:** basic guidelines and steps for making a basic bodice block

**2.5.2 Sleeveless bodice:** modify the basic bodice block for developing a sleeveless garment.

### Exercise

1. Collect pictures of garments which have been made using a basic bodice block. How many have two darts and how many are without any dart? Maintain this information in your scrap book.

**Teachers role** *Students should be asked to add these to the design folder made earlier and label each garment. Refer to these pictures to explain terminology and encourage discussions.*

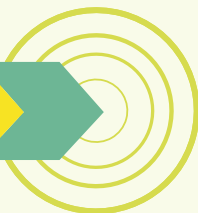
### 2. Fill in the blanks

- a. The waist of the bodice is trued by closing waist darts and then a line is drawn using a French curve.
- b. The back shoulder line is drawn with help of French curve by dropping  $\frac{1}{8}$ <sup>th</sup> on the armhole line.
- c. The apex is marked at half of center front.
- d. Waist dart at the back is calculated by subtracting the required waist measurement from obtained waist.
- e. Front waist dart is obtained by squaring out a line from apex to waist and the distance between this point and center front to princess is half of the dart.
- f. For sleeveless garment go  $\frac{1}{2}$ " up on the armhole level.

**Section 2.6** aims at inculcating the understanding of necklines.

**2.6.1 Necklines & Variations:** develop various necklines and methods of developing patterns of these necklines.

**2.6.2 Finishing of neckline:** methods of finishing these necklines with piping, facing and binding and merits and demerits of each.





## Exercise

1. Collect pictures of various necklines and maintain this information in your scrap book. Try making patterns of these necklines.

Teachers role Students should be asked to add these to the design folder made earlier and label each necklines. Refer to these pictures to explain terminology and encourage discussions

2. Fill in the blanks
  - a. To ensure that the neckline doesn't end in a point go out  $\frac{1}{4}$ "<sup>th</sup> on center front of the bodice.
  - b. While making a neckline deeper in front, it is advisable not to make the neckline wider and deeper at the back.
  - c. A curved neckline is drawn using a French curve.
  - d. The shaped facing is cut keeping the pattern of the shape of the desired piece.
  - e. The measurement required for any neckline is the depth of the neck measured from the intersection of the neck point to the center front of the garment.

**Section 2.7** aims at inculcating the understanding of principle of Dart Manipulation.

**2.7.1 Introduction:** introduces principles of dart manipulation and its uses in design development, methods of dart manipulation

**2.7.2 Slash & spread method:** explains in depth the most popular dart manipulation methods and step by step few examples of dart manipulation.

## Exercise

1. Collect pictures of blouses with different darts and seam lines and maintain this information in your scrap book. Try making patterns of at least five designs.

Teachers role Students should be asked to add these to the design folder made earlier and label each dart and seam lines. Refer to these pictures to explain terminology and encourage discussions. Ask them to try patterns of dart manipulations maybe on a small scale to understand and master the method.

## 2. Fill in the blanks

- a. Dart manipulation is a useful tool for pattern maker to create interesting and innovative designs for design development.
- b. A Dart is named after the seam it originates.





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- c. A waist dart is a dart that starts from **waistline**.
- d. Two methods of dart manipulation are **Pivot and Slash & Spread**.
- e. In this method the old dart is **closed** and its suppression folded and the new dart position is **slashed** and opened.

**Section 2.8** aims at inculcating the understanding of Skirt block development and design variations with the block.

**Section 2.8.1 Basic Skirt block:** gives basic guidelines and steps for making a basic skirt block

**Section 2.8.2 One dart basic skirt:** How to modify the two dart block by combining the two darts into a single dart

**Section 2.8.3 A-Line Skirt:** How to develop the skirt by adding fullness to the side seam

**Section 2.8.4 Flared Skirt:** step by step method of dart manipulation to develop a flared skirt and balancing a hemline.

## Exercise

1. Collect pictures of skirts with different hemlines and maintain this information in your scrap book. Try making patterns of at least five designs.

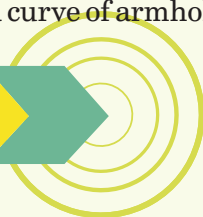
Teachers role Students should be asked to add these to the design folder made earlier and label each skirt. Refer to these pictures to explain terminology and encourage discussions. Ask them to try patterns of skirts maybe on a small scale to understand and master the method.

## 2. Fill in the blanks

- a. Balancing the hem of a flared skirt is required due to difference in the front & back pattern.
- b. A-line skirt has little/3" fullness added to the side seam of the skirt.
- c. A single dart skirt is made by combining the fullness/suppression of the two dart skirt.
- d. The length of the dart in the front in a single dart skirt pattern is 4.5"/longer in a two dart skirt pattern is 3.5"/shorter.
- e. The difference in length of dart in a single and two dart skirt is because if a dart is shorter and bigger it will result in a bubble at the dart point.

**Section 2.9** aims at inculcating the understanding of Sleeve.

**2.9.1 Sleeve Block:** gives basic guidelines and steps for making a basic sleeve block and the shape and curve of armhole along with steps to develop a set in sleeve.





## Exercise

1. Collect pictures of sleeves and its variations and maintain this information in your scrap book. Try naming these sleeves.

**Teachers role** Students should be asked to add these to the design folder made earlier and label each sleeve. Refer to these pictures to explain terminology and encourage discussions.

The section aims at inculcating the understanding of principles and development of Collars.

**2.10.1 Principle of collar development:** introduction to collar and its variations, including steps required for the development of collars

**2.10.2 Chinese Collar:** development of Chinese and Mandarin collars and basic principle of stand collars

**2.10.3 Peter Pan Collar:** development of Peter Pan collar and basic principle of flat collars

## Exercise

1. Collect pictures of blouses and dresses with different collars and necklines and maintain this information in your scrap book. Try making patterns of at least five design of collars.
2. Fill in the blanks
  - a. The cap height in a sleeve is required to draw the armhole of the sleeve.
  - b. A Chinese collar stands around the neckline of the garment and usual width of the collar is 3/4th".
  - c. A waist dart is a dart that starts from waist line.
  - d. Peter Pan collar rolls at the shoulder. This is achieved by overlapping front&back shoulder by at least 1/2".
  - e. Outer edge of the collar is called collar edge or leaf edge.