Working with Patterns

Unit

12

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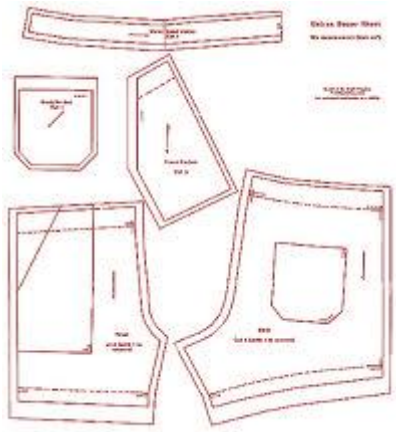
Learning Outcomes

On successful completion of this Unit the learner will be able to:

- **Discuss the various types of patterns available and the process of selection**
- **Explain how a commercial pattern differs from a trace pattern**
- **Explain how pattern markings assist in the cutting and making of clothing**
- **Describe of how to select a suitable sewing pattern.**

Patterns

In sewing and fashion design, a pattern is an original garment, from which other garments of a similar style are copied, or the paper or cardboard templates from which the parts of a garment are traced onto fabric before cutting out and assembling (sometimes called paper patterns).



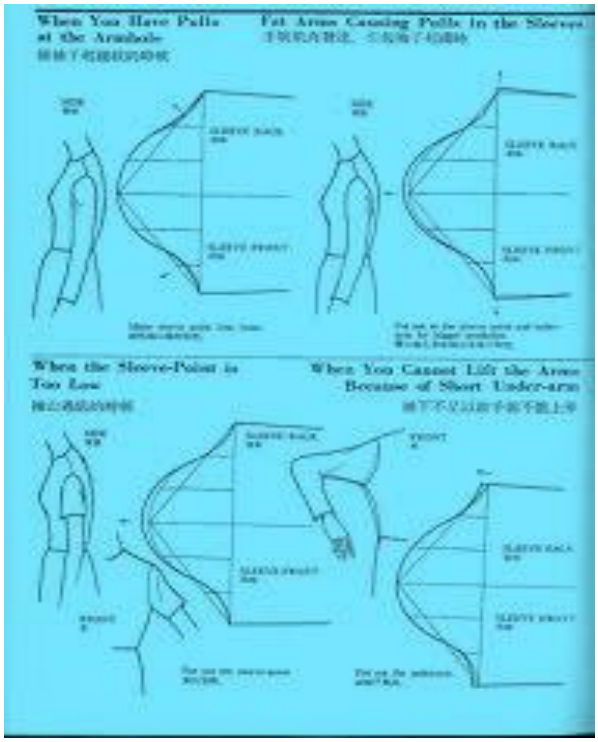
Pattern Types

The **flat pattern method** is necessary for areas like sleeves and pant legs, which would be difficult to drape on a figure. Basic shapes, such as bodices, sleeves, pants, or skirts, are draped or drafted.

The **draping method** (working with muslin on a dress form) is like fabric sculpture; it is ideal for soft, flowing designs. The patternmaker (sometimes the assistant designer) cuts and shapes the fabric to a dress form. This enables the designer to see the proportions and lines of the design exactly as they will look three-dimensionally, on the wearer. The design is

often altered as it develops on the form. Everything must be carefully marked: centre front, shoulder line, seams, armholes, buttonholes, and so on. When the designer is satisfied with the look and fit, the toile is taken off the form and *trued up;* the sketched lines are corrected with drafting curves, angles, and rulers; and the pattern is redrawn on heavy paper.

Drafting is blocking out on pattern paper a set of prescribed measurements for each piece. These patterns, after being tested for accuracy, become "blocks" or "slopers" that can be changed or adapted to each new style by moving darts and seams. Most pattern makers combine the two methods, depending on the dictates of the design, as well as on their technical training and preference.



Pattern Making

A custom dressmaker frequently employs one of three pattern creation methods. The flat-pattern method begins with the creation of a *sloper* or block, a basic pattern for a fitted, jewel-neck bodice and narrow skirt, made to the wearer's measurements. The sloper is usually made of lightweight cardboard or tag board, without seam allowances or style details. Once the shape of the sloper has been refined by making a series of mock-up garments called *toiles* (UK) or *muslins* (US), the final sloper can be used in turn to create patterns for many styles of garments with varying necklines, sleeves, dart placements, and so on.
Although it is also used for women's' clothing, the drafting method is more commonly employed in men's garments and involves drafting a pattern directly onto pattern paper using a variety of straightedges and curves.

The pattern draping method is used for more elaborate and unique designs that are hard to obtain through the flat pattern method. This is because it is nearly impossible to account for the way a fabric will drape or hang on the body without an actual 3-dimensional test run. It involves creating a toile mock-up pattern by pinning fabric directly on a dress form, then transferring the toile outline and markings onto a paper pattern or using the toile as the pattern itself.

Pattern Grading

Pattern grading is an essential part of pattern making. It decides how patterns increase or decrease sizes. According to countries, pattern grading includes USA's, EUR's, UK's, and CHN's. Generally, pattern grading adjusts for people of different ages and genders. The fabric type also influences the pattern grading standards

Patterns for home sewing

Home Sewing Pattern

Home sewing patterns are generally printed on tissue paper and sold in packets containing sewing instructions and suggestions for fabric and trim. Modern patterns are available in a wide range of prices, sizes, styles, and sewing skill levels, to meet the needs of consumers. Home sewing patterns are *graded*, that is, redrawn to fit larger and smaller sizes than the original design.

Marker Making by Computer

The making of industrial patterns begins with an existing block pattern that most closely resembles the designer's vision. Patterns are cut of oak-tag (manila folder) paper, punched with a hole and stored by hanging with a special hook. The pattern is first checked for accuracy, then it is cut out of sample fabrics and the resulting garment is fit tested. Once the pattern meets the designer's approval, a small production run of selling samples are made and the style is presented to buyers in wholesale markets. Once the style has demonstrated sales potential, the pattern is graded for sizes, usually by computer with an apparel industry specific CAD programme. Following grading, the pattern must be vetted; the accuracy of each size and the direct comparison in laying seam lines is done. Once these steps have been followed and any errors corrected, the pattern is approved for production. When the manufacturing company is ready to manufacture the style, all of the sizes of each given pattern piece are arranged into a marker, usually by computer. The marker is then laid on top of the layers of fabric and cut. Once the style has been sold and delivered to stores –

and if it proves to be quite popular – the pattern of this style will itself become a block, with subsequent generations of patterns developed from it.

Computer-aided design (CAD), also known as computer-aided design and drafting (CADD) is the use of computer technology for the process of design and design-documentation. Computer Aided Drafting describes the process of drafting with a computer. CADD software, or environments, provides the user with input-tools for the purpose of streamlining design processes; drafting, documentation, and manufacturing processes. CADD output is often in the form of electronic files for print or machining operations.

Ready Made Patterns

Patterns are marketed through pattern magazines, are available usually at bookstore, fabric store, or grocery stores. A number of independent pattern designers market their patterns via their Web or catalogues at fabric stores that carry fashion fabrics (fabrics that are made into clothing). In most pattern catalogues, projects are grouped by category, ranging from dresses and children's clothing to crafts and home decor.
All pattern pieces have the following information printed on or near the centre of each pattern piece:

Pattern Number

If you accidentally mix together pattern pieces of different projects, these numbers can help you figure out which pieces belong to which projects.

Name of the pattern piece:

These names are pretty straight forward- sleeve, front pant, and so on.

Size

Many pattern pieces show several sizes.

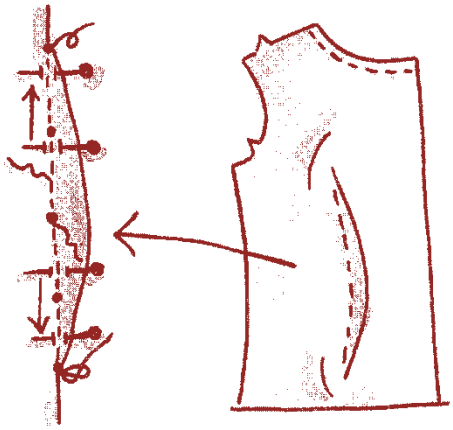
Cutting Line

This heavy outer line on the pattern piece lets you know where to cut and may feature scissors symbols.
Seam line or stitches line:

You usually find this broken line ¼ to 5/8 inch inside the cutting line.

Darts

Darts help shape the flat piece of fabric into a form-fitting one that fits the curves of the human body. Broken stitching lines meet at a point to create the dart. These lines show where to fold the fabric to create dart.



Zipper Position

This symbol shows the zipper placement. The top and bottom markings show you the length of the marking.

Grain Line

The most important pattern marking, the grain line symbol is a straight line that may or may not have arrows head at each end

The Hemline

The direction on the pattern shows the recommended finished length of the project, which varies from person to person.

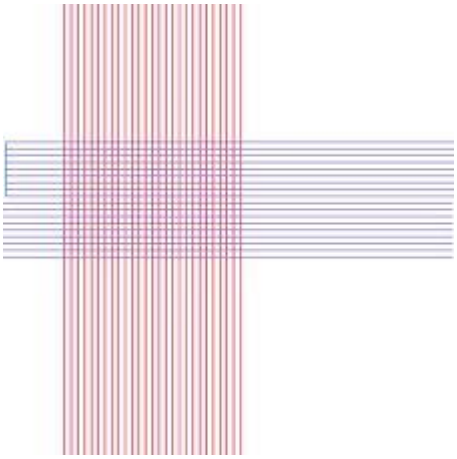
Laying Out the Pattern

Before laying out the pattern on the fabric, you need to understand some basic fabric terminology. Understanding the parts of the fabric and cutting your pattern pieces on-grain means that seams stay pressed and straight, pant legs and sleeves don't twist when you wear them, and the creases in your pants and the stripes, plaid, and prints stay perpendicular to the ground.

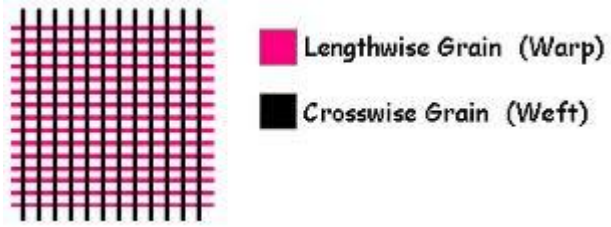
Getting to Know the Fabric

Selvages: The finished edges where the fabric comes off the looms, the selvages are parallel to the lengthwise grain.

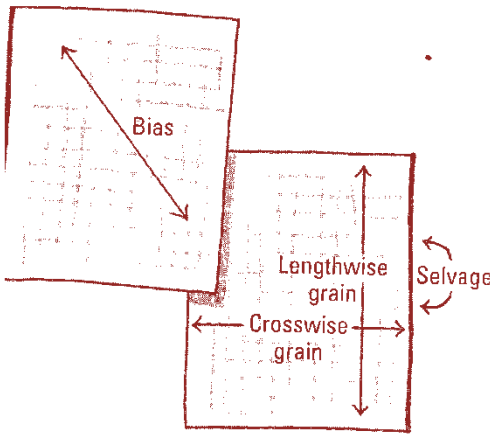
Lengthwise Grain or Grain Line: The grain line runs the length of the fabric, parallel to the selvages. On knit fabrics, the lengthwise grain is usually more stable and less stretchy than the crosswise grain.



Crosswise Grain: This grain runs across the width of the fabric, from selvage to selvage and perpendicular to the lengthwise grain. On knit fabrics, most of the stretch is usually across the grain.



***Bias*:** 45 degrees between the lengthwise and crosswise grains. When you pull a woven fabric on the bias it stretches and is very malleable. This is why bias tape and trims that are cut on the bias can be easily shaped to follow a curved edge.



Knowing Right from Wrong

The *right side* of the fabric is the pretty side that everyone sees. Most fabrics are folded or rolled on the bolt with the right side folded to the inside to keep it clean. The *wrong side* of the fabric is the inside that nobody sees when you wear the project. When you lay out the pattern for cutting, be sure that you lay out all the pattern pieces as shown in your pattern guide sheet instructions. The pattern guide sheet shows the right side of the fabric shaded in a darker colour than the wrong side of the fabric so you can see what's going on in the step-by-step illustrations.

Placing the Pattern Pieces on Grain

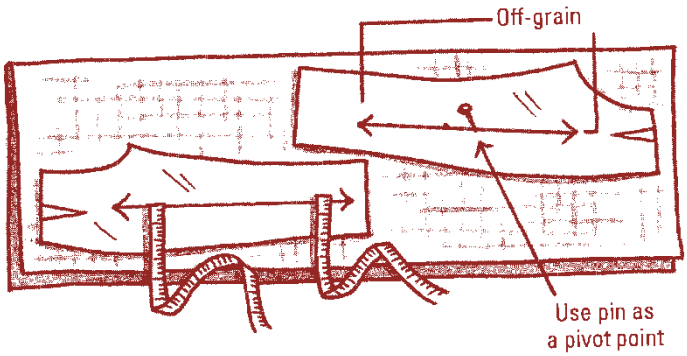
Each pattern piece shows a grain line (which can also be the place-on-fold symbol) which is also the lengthwise grain. The grain line allows you to cut the piece *on-grain,* meaning that the pattern piece lines up with the lengthwise grain of the fabric.

1. Find and cut apart the paper pattern pieces you need to make your project view; set them aside.If you're using a multi sized master pattern and want to preserve the option of making the project in a different size in the future, trace the pattern size you need on pattern tracing paper, remembering to transfer all the pattern markings from the master pattern. When you cut the paper pattern pieces apart, don't cut them out right on the cutting line; leave a little of the paper past the cutting line. Leaving the extra paper makes cutting out the paper pieces faster and easier when you get it on the fabric.

2. Locate the lengthwise grain or place-on-fold symbols on the paper pattern pieces. On a flat tabletop, before laying the pattern tissue on the fabric, mark over these symbols using a highlighter for easy reference

3. Fold and then lay the fabric on a table or cutting board, as shown in the pattern guide sheet instructions. If the fabric is longer than your table or cutting board, prevent the excess fabric weight from stretching and pulling on your fabric by folding it and laying it on the end of the table.

4. Following the suggested layout found on the pattern guide sheet lay out the pattern on-grain, making sure that the grain line is parallel to the selvages



Check that each pattern piece is placed precisely on-grain by poking a pin straight down into the grain line, measuring the distance straight across from one end of the grain line to the selvage, and then measuring the distance from the other end of the grain line straight across to the same selvage. Be sure *to* pivot the paper pattern so that each end of the pattern piece is equidistant from the selvage.

Pinning and Cutting Out the Pieces

Pin the pattern piece to the doubled layer of fabric so that the pins go through both fabric layers and are perpendicular to and inside of the cutting line. This prevents the fabric from shifting during the cutting process. You don't need to pin every inch. Just pin at the notches and everywhere the pattern changes direction. On long, straight edges, such as pant legs and sleeve seams, place pins every 4 inches or so. Cut out your pattern pieces using a pair of sharp dressmaker's shears. For accuracy, cut in the middle of the solid cutting line marked on the pattern tissue, trying not to lift the fabric off the table too much when cutting. When you begin constructing a project, you transfer the pattern marks indicating darts, tucks, pleats, and the other symbols to your fabric pattern pieces for a very good reason: To see and understand what the drawings and text in the pattern guide sheet mean for you to do. For example, when marking a pleat, tuck, or dart, instead of marking the entire stitching line, simply mark the dots on the stitching lines. When you put the right sides together for sewing, pin the project together by matching the dots; sew from dot to dot (pin to pin). For specific instructions on marking and sewing darts, tucks, and pleats, see your pattern guide sheet instructions.

Suggested Further Readings:

- **How Patterns Work: The Fundamental Principles of Pattern Making and Sewing in Fashion Design (By Assembil Books)**
- **Designing Patterns - A Fresh Approach to Pattern Cutting (FashionDesign) by Hilary Campbell**