



101 Things I Learned™ in Fashion School

Alfredo Cabrera with Matthew Frederick

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Author's Note

A good fashion design curriculum encourages students to come up with informed, creative solutions to the problem of dressing people for their lives. In my years of teaching, I have found that the greatest obstacle to this goal is not the acquiring of technical proficiency or adequate intellectual information—certainly, with the availability of information today, the average eight-year-old is likely more sophisticated and fashion-savvy than ever—but in accepting the need to design for real people.

The perception on the part of many students (and sometimes instructors) is that reality—real customers with real needs—is the enemy of creativity. Real experience, it is feared, means drudgery, compromise, and mediocrity. The result is that most curricula tend toward the theoretical, with practical application addressed only to the extent it is considered unavoidable. It often seems that student designs more often resemble ideas than clothing.

It took me years as a working designer to *realize* the importance of identifying a real living customer and recognizing what he or she will and won't wear. Far from being anti-creative, it was for me the beginning of true creativity. For what is creativity if it isn't to take something existing in one head and give it relevance in the real world?

The central purpose of this book, then, isn't to impart technical proficiency (although we hopefully will do some of that) or to challenge students creatively (though I hope we will do that too), but to give students some ways to connect the two. We hope to provide students with small reminders, touchstones, and catalysts to help them solve real problems creatively—and creative problems realistically.

I hope that students and designers will keep this little book handy while researching, designing, swatching, and illustrating. I hope the history lessons help readers understand that innovation happens in context and through reaction to what came before; that the lessons in organization motivate the development of a holistic design process; that the lessons in illustration demonstrate the importance of communication; and that the business lessons lend a sense of the designer's role in the larger world.

Alfredo Cabrera

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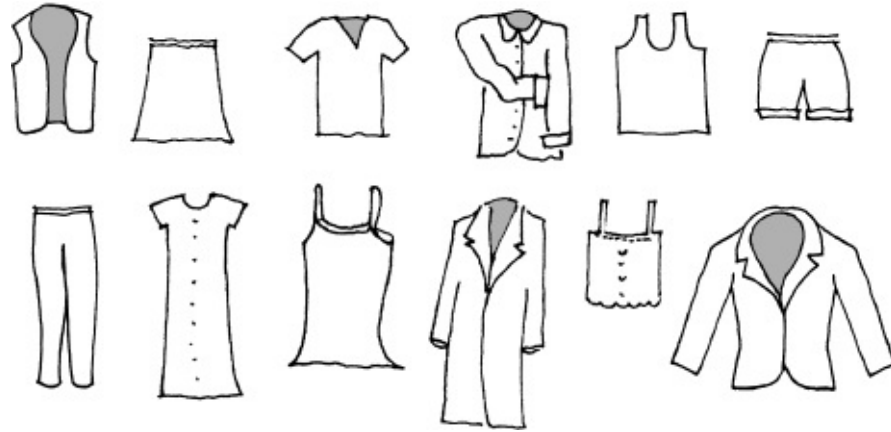
[Fashion was born in the 12th century.](#)



There are two ways to clothe the human form. In draping, simple pieces of cloth are wrapped around the body, with the excess falling in natural folds. This was the earliest method of making clothing from textiles. However, while draped clothing was traditionally ephemeral—it lost its shape when not in contact with the body—draped clothing today usually has a tailored understructure.

Tailoring dates to the Early European Renaissance of the 12th century, when a celebration of the natural world in science, philosophy, and art brought about a focus on the human form. The draped robe was divided into multiple pieces to more closely fit the body. These pieces evolved into *patterns* that were used to create multiple garments. The advent of tailoring was thus the birth of fashion.

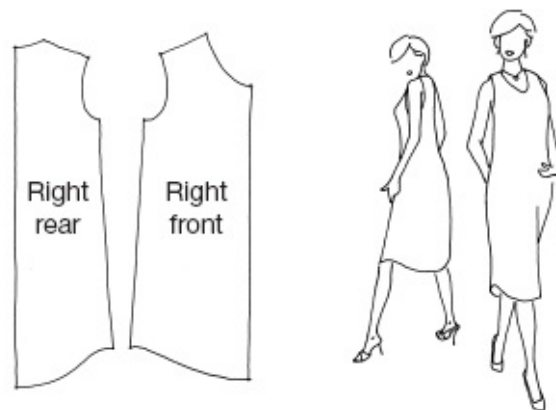
Fashion designers create collections, not simply individual garments.



Depending on the size of a design house, a collection may have anywhere from 12 to 400 garments. A designer plans a collection so that every item complements the others; they can be worn together or individually.

A designer gives attention to every piece in a collection, including underpinnings and layering pieces, not just the exciting gowns, suits, dresses, and other major items. After you've worked hard to cultivate a customer for the primary garments, why send him or her elsewhere for the rest of the outfit?

Fashion-ese



Pattern (def. 1) for a sleeveless dress

Collection: 1. a thematically cohesive group of garments created by a designer for a season. 2. a category of clothing, e.g., an outerwear or swimwear collection.

Drape: 1. the reaction of a fabric to gravity, how it “falls.” 2. to manipulate a fabric on a dress form while creating a design.

Fabric story: a group of fabric samples conveying a designer’s selections for a collection. Sometimes referred to as a fabric storyboard or a fabrication.

Finish: 1. the surface texture of a woven fabric. 2. a final fashion drawing.

Fit: 1. the way in which a garment drapes or falls on the body. 2. to make adjustments to a muslin or sample on a model or mannequin.

Line: 1. the general silhouette or flow of a garment, e.g., “the line of an evening gown.” 2. a synonym for *collection*, e.g., “our fall line emphasizes a retro look.”

Muslin: 1. an inexpensive, finely-woven cotton fabric. 2. a prototype garment, created to work out design and fit; called a muslin regardless of the fabric.

Pattern: 1. a template for the individual pieces of a garment. 2. a visual design, e.g., check, stripe, or floral.

Fashion is born from ideas.



Diane von Furstenberg's wrap dress

A single dress or t-shirt can be created without an underlying concept, but an entire collection cannot. A fashion collection must be driven by an idea that transcends material reality, and is based in an attitude toward or approach to life, art, beauty, society, politics, and self. Examples of popular idea-driven fashions include:

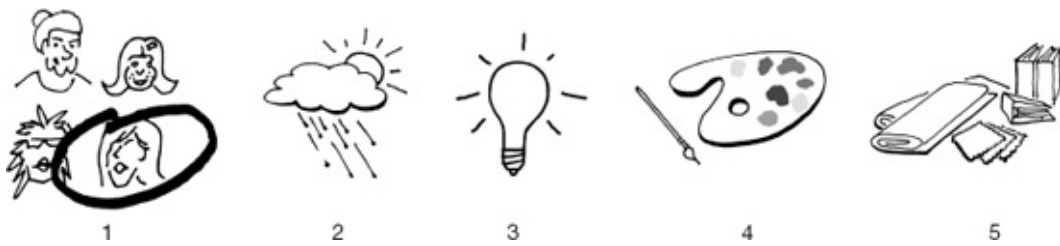
- **Diane von Furstenberg's wrap dress:** It was motivated and preceded by the broad-based entry of women into professional workplaces and a desire to project authority while remaining feminine and sexy.
- **Giorgio Armani's relaxed, elegant tailoring:** It responded to the emergence of new businesses and more informal business models in the 1970s and 1980s, ultimately paving the way for the now familiar "casual Fridays."
- **Grunge:** Before it became a popular fashion look, grunge was a movement that sought to reject lifestyle-consciousness.



“Fashion is the attempt to realize art in living forms.”

—SIR FRANCIS BACON (paraphrase)

The Five C's of good pre-design



The fashion design process is complex and iterative, and does not proceed in exactly the same way for all designers. Nonetheless, a progression of consistent pre-design steps is identifiable in the processes of successful fashion designers:

1 Customer: Understand who you are designing for.

2 Climate: Know the season of the year for which the collection is intended.

3 Concept: Explore and create a “big idea” that will inspire the entire collection.

4 Color: Determine a suitable color palette.

5 Cloth: Investigate and identify the fabrics for the garments in the collection.

The design of individual garments proceeds in earnest only *after* arriving at the cloth.

Know who you aren't designing for.



A fashion designer must know much about the intended customer: How old is he or she? Where does he live? How does she make a living? How much does she earn? Where does he shop? What does she already wear? What is she not being offered? To what goals does he or she aspire? Such questions help a designer frame an intuitive box around a fashion design problem.

When a customer is particularly difficult to define, it can be helpful to define an entirely different customer—one for whom the product is absolutely *not* intended. The effort involved in assessing the lifestyle needs of another usually helps a designer better grasp the intended customer.

Design outside in, top to bottom, big to small.



The many items comprising a collection—suits, skirts, slacks, jackets, blouses, sweaters, accessories and more—have to be carefully coordinated. Yet it is impossible to conceive and design everything at once. How does one prioritize?

Design outside in: The design of outer garments such as coats and jackets should be undertaken before the garments they partially conceal, such as vests, blouses, and underpinnings.

Design top to bottom: Garments near the face are inherently more important than and should receive design priority over clothing worn lower on the body.

Design big to small: Large pieces of clothing such as dresses, suits, and coats should almost always be designed before shirts, blouses, vests, and knit tops.

These three strategies roughly correlate with the apportionment of the fashion dollar: Customers tend to spend more on items worn outside other items, on items closer to the face, and on larger items.

Create an organized fabric story.



Coat/outerwear weights: heavy weight fabrics for fall/winter, as well as medium weight technical fabrics and fabrics that have been treated for water repellence for spring/summer.

Jacket or bottom weights: medium weight fabrics for structured garments including suits, pants, skirts, tailored dresses, and jackets not worn as outerwear.

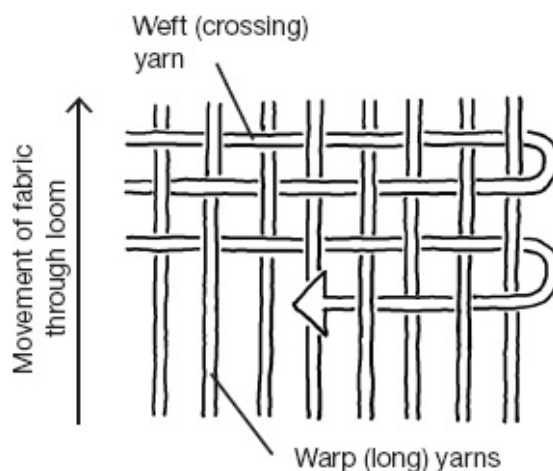
Dress/blouse weights: light weight, sheer, and silky fabrics for shirts, blouses, flowing dresses, skirt gowns, and other soft garments.

Sweater weights: bulky, warm yarns for fall/winter as well as fine, cool yarns for spring/summer.

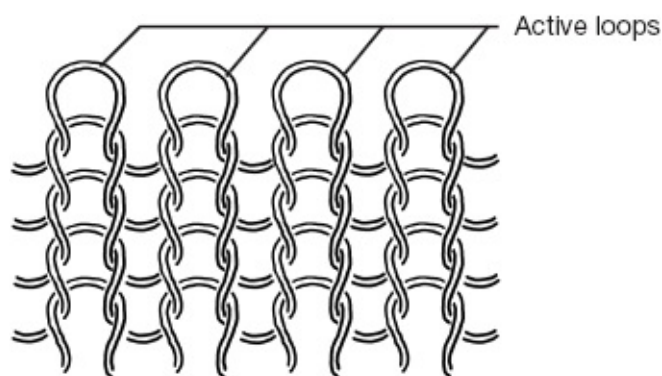
Cut & sew knits: for underpinnings, casual dresses or gowns.

Novelty fabrics: have a feature that makes them ideal for special items but limited for basic use, such as lace, leather, fur, PVC/vinyl, etc.

Weaving and knitting



Weaving



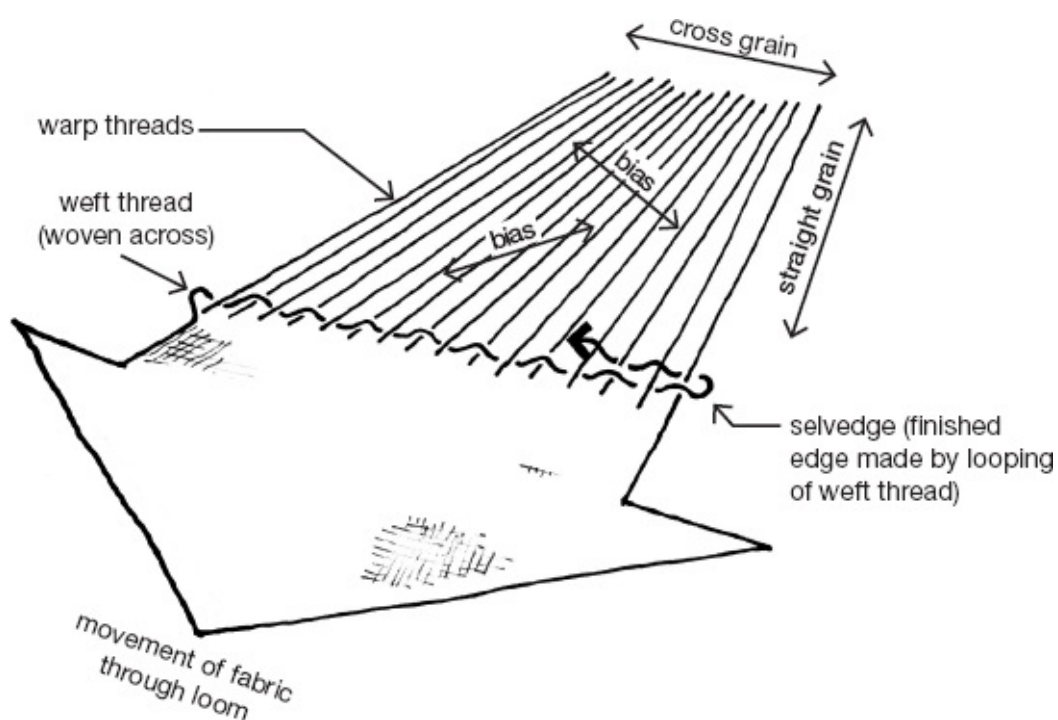
Knitting

Most fabrics are made by weaving or knitting. Woven fabrics are made by interlacing a continuous yarn repeatedly through a series of parallel yarns. The parallel yarns (*warp* yarns) are held in place by a *loom*, and the crossing yarn (*weft* yarn) is laced through them in an “over-under” manner. After each trip across, the weft yarn reverses direction.

Knitted fabrics are made from a single continuous yarn interlocked onto itself. A row of active loops (called *stitches*) is held in place by a needle as another series of loops is pulled through it with a second needle. This produces a new row of active stitches, and the process is repeated.

Netting, felt, and PVC (polyvinyl chloride) are neither woven nor knitted, and are of comparatively limited use in fashion design.

Go with (or against) the grain.



Straight grain (or warp) is the long direction of woven fabric; it is the direction in which it moves through a loom. The straight grain is the strongest axis; it has almost no stretch or “give.” Most garment pieces are cut “on the straight”; that is, with the straight grain running vertically (perpendicular to the floor) when the wearer is standing.

Cross grain (or weft) refers to the short direction of woven fabric, across the loom. Fabric usually has a little bit of stretch in the direction of the cross grain. When a jacket is cut on the straight, the cross grain allows it to feel a little stretchy when the wearer folds his or her arms.

Bias is the 45-degree angle between the straight and cross grains. Fabric has the most stretch in the bias direction. Before spandex, the only way to get significant stretch from woven fabric was to cut it on the bias—a practice which can be prohibitively expensive due to its considerable waste.

Design *into* the fabric.



Novice designers often select fabrics only after creating a garment's silhouette. But a well conceived garment can be destroyed by cutting it in the wrong cloth. Many fabrics simply will not do what a designer wants. Silk gazar, for example, is thin and paper stiff and will not accept close tailoring or free draping.

Before beginning the design of a garment, the fabric group for the collection must be considered in detail. Garments are designed *into* their fabrics, not the other way around.

Cotton is a fiber, not a fabric.



Cotton plant

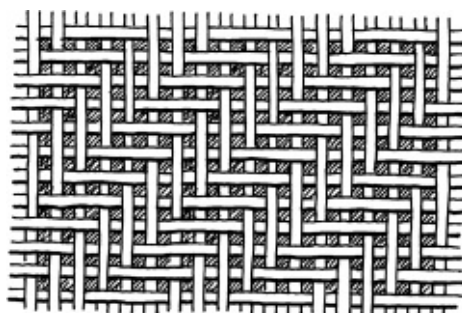
A fiber is a filament of raw material, the smallest essential element of a garment. It may be very long or as short as a few centimeters. Fibers are made into thread or yarn by spinning, and are subsequently woven or knitted into cloth. Fiber types are categorized as follows:

Natural fibers are found in nature. The four basic natural fibers are silk, wool (animal fibers), cotton, and linen (vegetable fibers). Others include cashmere, alpaca, vicuna, ramie, and hemp, all of which can be costly and difficult to use compared to the basic fibers.

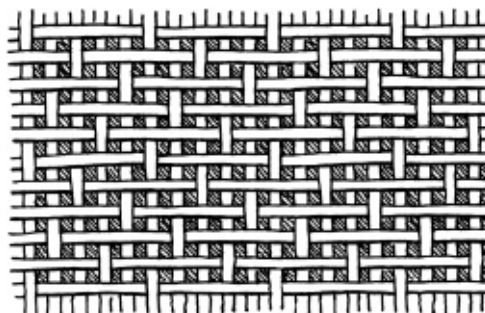
Manufactured fibers are created by processing natural cellulose—the same basic material as cotton and linen. Examples include rayon, acetate, and modal.

Synthetic fibers are created by forcing a liquid chemical through a small hole to produce a continuous strand or filament. Common synthetics are nylon, polyester, and acrylic.

Satin is a weave, not a fabric.



3/3 twill weave



Satin weave

Fabric weaves are generally distinguishable by their surface, or face, characteristics. Innumerable faces are available; some common ones include:

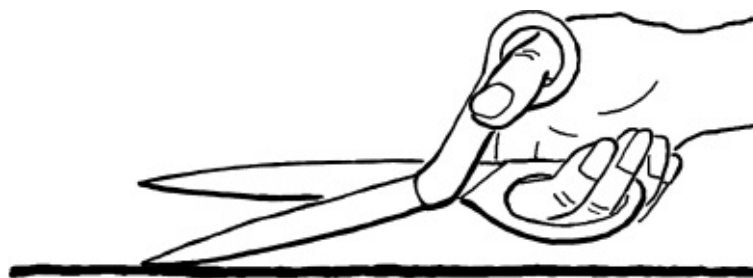
Twill has raised diagonal lines on the face. Examples include denim, cavalry twill (a rugged, flexible fabric), and foulard (a silk fabric). Commonly used in military uniforms.

Satin is characterized by a shiny, smooth face. Examples include duchesse (a stiff, glossy silk), charmeuse (a shiny, watery fabric), and peau de soie (a silk with a dull luster).

Jacquard has a woven pattern visible on the face as a subtle change from shiny to matte. Examples include damask (a rich tonal-patterned fabric), brocade (a fabric with a multi-colored pattern), and matelassé (resembles quilting). Useful in both fashion and home decor.

Pile is characterized by a fuzzy or hairy surface called *nap*. Examples include velvet (a fine, short nap), terry cloth (a spongy, looped nap used for bath towels), and corduroy (a surface with parallel cords).

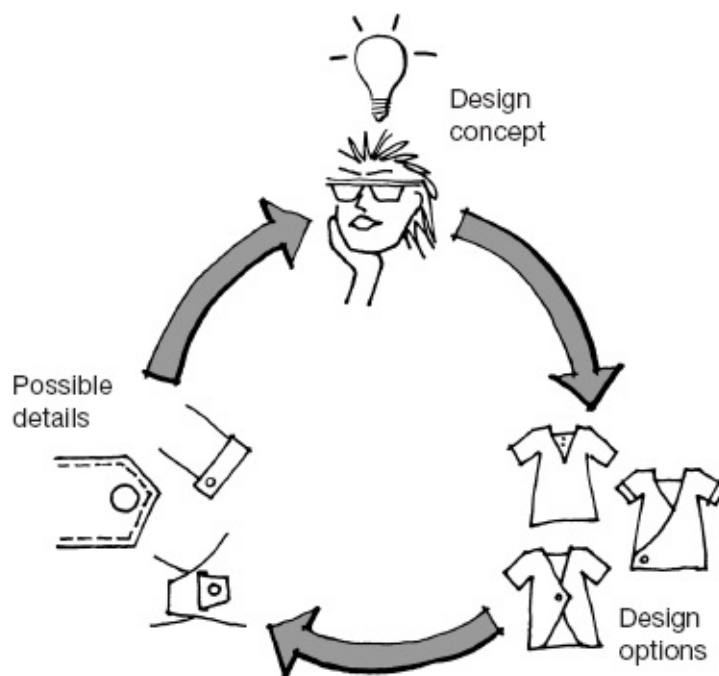
How to cut fabric



Always keep the bottom blade in full contact with the table.

- 1** Lay the fabric flat on a table; don't attempt to cut it while holding it in front of you. The table should be positioned to allow access to all sides.
- 2** Smooth out all creases and bubbles, using an iron as needed. Make sure the straight and cross grains are exactly perpendicular—something that requires particular care with many fabrics, such as chiffon and charmeuse.
- 3** Mark cut lines clearly, whether making a straight or curved cut. If using a pattern or template, pin it to the fabric.
- 4** Use very sharp shears. Never use shears that have been used to cut paper.
- 5** Grip the shears firmly, and cut smoothly along your lines or at the edge of the paper pattern. Stop each cutting stroke before the blades fully close to avoid a choppy edge. Continue each cut slightly beyond the desired stopping point.
- 6** To make a cut in a different direction, do not lift or move the fabric. Instead, walk around the table and cut from a natural, more convenient angle.

Details aren't add-ons to a design concept; they're essential to formulating a design concept.



A successful design is conceptually driven, but a concept is rarely, if ever, understood without developing the details. Do blow-up drawings of garment details throughout your design process, even early on. Don't just explore decorative flourishes, but also highly functional considerations such as pockets, closures, and seams.

Sometimes details can back-drive the design process: A designer may create a garment with a specific silhouette in mind, but once detailed the silhouette may change dramatically. And occasionally, a great idea for a detail can become the inspiration for an entire collection.

If you don't know how the garment you've designed will be made, you haven't designed anything.



A good designer doesn't rely on more technically astute persons to turn his or her creations into workable realities. To the contrary, the more accomplished the designer, the more thoroughly he or she engages in technical execution—structure, seaming, hardware, patternmaking, fabric selection, and more. To do otherwise is, paradoxically, to *cede* control of the design process and put the “brilliant” designer at the *bottom* of the creative food chain. Indeed, as a design concept proceeds toward realization, patternmakers, sample-hands, models, and even salespersons will seek to change to suit their needs. A savvy individual among them might dismiss the objections of a poorly informed designer by saying, “What you want can't be done.” How would an uninformed designer know otherwise?

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