## FASHION DESIGN AND MERCHANDISING <br> 52.1900.20 <br> TECHNICAL STANDARDS

An Industry Technical Standards Validation Committee developed and validated these standards on April 5, 2016. The Arizona Career and Technical Education Quality Commission, the validating authority for the Arizona Skills Standards Assessment System, endorsed these standards on May 12, 2016.
Note: Arizona's Professional Skills are taught as an integral part of the Fashion Design and Merchandising program.

## The Technical Skills Assessment for Fashion Design and Merchandising is available SY20172018.

Note: In this document i.e. explains or clarifies the content and e.g. provides examples of the content that must be taught.

## STANDARD 1.0 APPLY MATHEMATICAL PROCESSES TO PROBLEMS IN DESIGN AND MERCHANDISING

1.1 Express problems in design and merchandising using numeric, symbolic, and/or graphic representations
1.2 Perform mathematical calculations in the context of design- and merchandising-related problems
1.3 Identify and perform conversions of units of measurement (English and metric)
1.4 Calculate yardage multiplied by man hours and material price for a design project
1.5 Solve common problems in merchandising and manufacturing using mathematical formula (e.g., markup/markdown, gross margin, keystoning, and profit and loss)
1.6 Calculate the transition from sample to mass production
1.7 Use a chart to identify fabric weight per square yard

## STANDARD 2.o EXAMINE MEASUREMENT TECHNIQUES IN DESIGN, MANUFACTURING, AND MERCHANDISING

2.1 Identify the functions of common measurement tools used in design, manufacturing, and merchandising (e.g., French curve, Scurve, tape measure, see-through ruler, hem gauge, and hip curve)
2.2 Select the appropriate measurement technique for a specific need (e.g., pleating, seaming, and gathering)
2.3 Select the appropriate measurement tool for a specific task

## STANDARD 3.0 ANALYZE THE PRINCIPLES AND ELEMENTS OF DESIGN

3.1 Explain basic design elements and principles
3.2 Identify terminology related to color principles (e.g., color washes, psychology of color, physics of color, and color scheme)
3.3 Differentiate between hue, value, and intensity
3.4 Explain how elements and principles create visual illusion or flattering aesthetic
3.5 Explain how color, pattern, and material create mood in design

## STANDARD 4.0 EVALUATE TEXTILES, FIBERS, AND FABRICS

4.1 Identify the characteristics of natural and synthetic/manufactured fibers
4.2 Identify the names of fabrics with various construction weaves
4.3 Describe the characteristics of fabrics with various construction weaves
4.4 Differentiate among woven, knit, and other methods of fabric construction
4.5 Identify fabric finishes
4.6 Identify color application methods
4.7 Select fibers and fabrics for specific end uses
4.8 Apply labeling information to care for fabrics

## STANDARD 5.0 EXAMINE THE OPERATIONS OF RETAILING (BRICK-AND-MORTAR AND E-COMMERCE)

5.1 Distinguish quality customer service from poor customer service
5.2 Analyze the relationship of customer service and customer satisfaction on business success
5.3 Explain the concept of a target customer
5.4 Describe how a target customer affects product selection
5.5 Explain merchandise buying practices (e.g., how to receive, mark, and stock merchandising)
5.6 Explain the relationship among pricing, profit, and customer's perception of value
5.7 Describe common selling techniques (e.g., suggestion selling, loss leader, upselling, and cross-selling)

## STANDARD 6.0 EXAMINE MARKETING SKILLS FOR THE SUCCESS OF DESIGN AND MERCHANDISING BUSINESS

6.1 Describe the concept of target customer as relates to retail marketing
6.2 Describe the effect of visual merchandising on the customer
6.3 Evaluate the concept of visual merchandising using the elements and principles of design
6.4 Describe effective uses of social media for fashion marketing
6.5 Explain types and uses of promotional activities to market products and services (e.g., email, social media, in-store, loyalty programs, and flyers)
6.6 Describe ethical behavior in marketing

## STANDARD 7.o DISTINGUISH INFLUENCES ONTHE FASHION DESIGN INDUSTRY

7.1 Describe key moments in 20th century history that influenced the development of American fashion (e.g., cotton gin, sewing machine, paper pattern, and media)
7.2 Identify psychological influences on the development of fashion trends (e.g., denim and identification with the working class, the 80s "power suit", and Chanel pants as an expression of liberation)
7.3 Describe the relationship between fashion trends and forecasting
7.4 Explain how values are communicated through clothing and accessories
7.5 Describe the role of leading designers, celebrities, and others in determining fashion trends

## STANDARD 8.0 ANALYZE A FASHION DESIGN AND MERCHANDISING BUSINESS

8.1 Describe employment opportunities in the apparel industry
8.2 Compare the advantages and disadvantages or sole proprietorships, partnerships, and corporations
8.3 Identify the stages of apparel production
8.4 Differentiate fashion design lines and price points (e.g., haute couture, designer, bridge, contemporary, moderate, and budget/mass market)
8.5 Explain the importance of sourcing as relates to the design process
8.6 Describe the steps in the manufacturing process
8.7 Describe how design decisions can affect the cost of apparel products
8.8 Identify components of trade relations (e.g., taxes, trade agreements, tariffs, import/export, and duties)
8.9 Identify channels for product distribution

## STANDARD 9.0 ANALYZE FACTORS THAT DETERMINE THE SELECTION OF CLOTHING

9.1 Describe how people use clothing to express themselves
9.2 Identify body types and characteristics that influence the proper selection of clothing (e.g., anthropometrics and physical attributes)
9.3 Describe how an illusion of size can be created by the proper selection of fabric design
9.4 Describe how an illusion of size can be created by the proper selection of fabric texture

## STANDARD 10.0 CONSTRUCT A GARMENT BY PRECISELY APPLYING THE PRINCIPLES OF QUALITY APPAREL CONSTRUCTION

10.1 Compare the quality of different clothing construction techniques and their financial result (e.g., serged seam vs. wide margin seam)
10.2 Determine yardage, cost of fabric, and other needs for selected pattern style and use
10.3 Define terms commonly used in pattern directions and layout (e.g., straight grain, cross grain, bias, selvage, center front, nap, and print matching)
10.4 Interpret and follow pattern directions for constructing apparel
10.5 Perform pattern layout and cutting for garment construction to minimize waste/cost
10.6 Explain the use of appropriate equipment to practice effective pressing techniques (e.g., sewing and pressing)
10.7 Evaluate the construction and proper fit of garments

## STANDARD 11.0 PREPARE FASHION DESIGNS

11.1 Identify styles, parts, and details that make up a garment
11.2 Describe and use the proportions of a fashion figure/croquis
11.3 Identify ways physical attributes including disabilities influence clothing design
11.4 Describe the principles and elements of design in fashion sketches
11.5 Select appropriate fabric swatches for a fashion design
11.6 Identify design features and construction details on a flat
11.7 Identify the correct order of steps in developing a sample garment
11.8 Identify computer software and applications for computer-assisted design (CAD) in the fashion industry (e.g., Auto CAD, Photoshop, and Illustrator)
11.9 Select possible components of an apparel line

## STANDARD 12.0 EXPLAIN THE IMPORTANCE OF ACCESSORIES TO FASHION

12.1 Identify accessory categories
12.2 Identify accessory styles within various categories
12.3 Recognize quality construction features of different accessories (e.g., jewelry: plating, fasteners; handbags: lining, edging, and hardware)

## STANDARD 13.0 ETHICAL ISSUES IN FASHION DESIGN AND MANUFACTURING

13.1 Describe common ethical issues to be considered in sourcing and manufacturing (e.g., workers' rights, pollutants, energy efficiency, and animal rights)
13.2 Explain the use of the "triple bottom line" (social, environmental, commercial) in defining sustainability in the fashion industry
13.3 Identify actions taken within the fashion industry to support ethical design, manufacturing, and distribution (e.g., upcycling/recycling materials, "fair trade" and "cruelty-free" labeling, and green/sustainable design practices)

