



# Family and Consumer Sciences Education 2009 Standards Review



Industry Sector: Hospitality, Human Services and Education; STEM, Arts, Design and Information Technology

Cluster: Human Services; Arts/AV Technology and Communication

Pathway: Consumer Services; Visual and Design Arts

The Human Services Cluster prepares individuals for employment in career pathways related to families and human needs.

The Visual and Design Arts Pathway prepares individuals to enhance their artistic skills and interests.

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### Description

*The purpose of this course is to expose students to various aspects of the fashion design and merchandising industry. Students integrate knowledge, skills, and practices to evaluate potential career opportunities. Emphasis is placed on an introduction to fashion, fashion and textile selection, product construction and fashion merchandising.*

### Outline

- I. Career Paths in the Fashion and Textile Industry-N.16.1
  - A. Designers
    - 1. Past
    - 2. Current
  - B. Roles-functions of individuals in textile industry-N16.1.1
  - C. Employment and Entrepreneurial Opportunities-N16.1.2
    - 1. Education and Training Requirement-N16.1.3
    - 2. Create Employment Portfoli-N16.1.5
  - E. Local, State, National and Global Economic Effects of Fashion Careers-N16.1.4
  - F. Professional Organizations –N16.1.6
- II. Fibers, Fabrics and Textiles
  - A. Characteristics of Fibers N16.2.1, N16.2.2, N16.2.3, N16.2.4, N16.2.5
    - 1. General Fiber Characteristics
      - a. Strength
      - b. Durability
      - c. Resiliency
      - d. Shape Retention
      - e. Cost
    - 2. Natural
      - a. Cotton
      - b. Flax/Linen
      - c. Wool
      - d. Silk
    - 3. Synthetic/Manufactured
      - a. Polyester
      - b. Nylon
      - c. Acrylic
      - d. Rayon
      - e. Spandex
    - 4. High Tech Fibers
      - a. Polypropylene
      - b. Lyocell

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- c. Aramid
- 5. New Trends in Fiber Development
  - a. Performance Fibers
  - b. Blends
  - c. "Smart" Fibers
  - d. Micro fiber
- 6. "Green"/Recycled Products
  - a. Environmentally-friendly manufacturing process
  - b. Environmentally-friendly materials
- B. Yarn Construction
  - 1. Spun
  - 2. Filament
  - 3. Ply
  - 4. Novelty
  - 5. Texturing and Blending Processes
- C. Fabric Construction
  - 1. Woven
    - a. Plain
    - b. Twill
    - c. Satin
    - d. Basket
  - 2. Non-woven
    - a. Felting
    - b. Bonded
  - 3. Knit
  - 4. Other
    - a. Laminated
    - b. Laces
    - c. Nets
    - d. Quilted
- D. Fabric Finishes
  - 1. Color and Design
    - a. Printing
    - b. Dyeing
  - 2. Mechanical/Physical (Napping, Calendering, Distressing, etc.)
  - 3. Chemical (Flame and Water Proofing) (Crease, Shrink and Stain Resistance)
  - 4. Performance Enhancing (Sun and Allergy Protection)
- E. Textile Labeling Regulations

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1. Fiber Content
2. Textile Products Care
3. Fiber Safety (Flame Retardant)
4. Fiber Branding
  - a. Generic Brands
  - b. Brand Names (Trademark)

### III. Fashion Apparel and Textile Design Skills

*Comprehensive Standard: Demonstrate Fashion Apparel and Textile Design Skills N16.3*

- A. Common Terms
  1. Fashion, Fad, Classic, Style, Design, Trends, Branding
  2. Fashion Cycle
  3. Basic Design Styles
- B. History of Fashion
- C. Fashion Capitals
  1. Europe (Paris, Milan, London)
  2. U.S. (New York, Los Angeles, Dallas)
  3. Asia (Tokyo, Hong Kong)
  4. Emerging markets (Viet Nam, Korea)
- D. Design Concepts (ID)
  1. Elements of Design
    - a. Line
    - b. Shape/Form
    - c. Color
      - i. Psychology
      - ii. Schemes
      - iii. Color Theory
    - d. Texture/Pattern
  2. Principles of Design
    - a. Proportion/Scale
    - b. Balance
    - c. Emphasis
    - d. Rhythm
    - e. Harmony
  3. Fashion Illustration and Design
    - a. Computer Design
    - b. Illustrations/Sketching
  4. Fashion Selection
    - a. Personal Styles

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- i. Personality
- ii. Lifestyle
- iii. Culture
- b. Body Types
  - i. Ideal
  - ii. Body Shapes
    - aa. Hourglass
    - bb. Triangle
    - cc. Inverted Triangle
    - dd. Rectangle
- c. Individual Body Variations
  - i. Figure Analysis
  - ii. Unique Body Proportions
- d. Illusion Dressing
  - i. Texture
  - ii. Color
  - iii. Line and Proportion
- e. Accessories
  - i. Categories
  - ii. Quality Features
  - iii. Rules for accessorizing
- f. Apparel and Wardrobe Purchasing
  - i. Judging Value and Quality
  - ii. Comparison Shopping
  - iii. Packaging, Hangtags, Labels

#### IV. Construction

- A. Sewing Equipment and Tools
  - 1. Machines
  - 2. Measuring
  - 3. Marking
  - 4. Cutting
  - 5. Pinning
  - 6. Stitching
  - 7. Pressing
- B. Project Preparation
  - 1. Personal Measurement and Size Determination
  - 2. Reading a Pattern Envelope
  - 3. Fabric width, yardage, and nap

- 4. Fabric preparation (Pre-shrinking, grain, etc.)
- C. Project Selection
  - 1. Pattern style and size
  - 2. Fabric
  - 3. Yardage amount
  - 4. Notions
- D. Project pre-construction
  - 1. Fabric Preparation (Preshrink, Pressing, Straightening Grain)
  - 2. Pattern Preparation
  - 3. Fabric and pattern layout
  - 4. Cutting and marking
- E. Project Construction
  - 1. Construction techniques
  - 2. Pressing techniques
  - 3. Finishing techniques
  - 4. Project evaluation
- V. Fashion Merchandising
  - A. Stages of Merchandising
    - 1. Design
    - 2. Manufacturing
    - 3. Marketing
      - a. Promotion and Advertising
      - b. Wholesale and Retail
      - c. Internet
  - B. Retail Sales
    - 1. Types of Fashion Retailers
    - 2. Target Markets
    - 3. Branding
    - 4. Retail Positioning
      - a. Product
      - b. Price
      - c. Place
      - d. Promotion
  - C. Advertising and Promotion
    - 1. Visual Merchandising
    - 2. Fashion Shows/Special Events
    - 3. Media/Press/Journalism
    - 4. Trend Forecasting

D. Technological Advances

1. Textiles
2. Design
3. Production
4. Merchandising

E. Global Perspectives

1. Trade, Trends, Policies
2. International Sourcing/Importing
3. Market Opportunities for Exporting

VI. Customer Service

A. Customer Service

1. Service Quality
2. Sales Strategies
  - a. Discounts/Rewards
  - b. Coupons/Incentives

B. Cultural Diversity Influences

C. Customer Concern Solutions

V. The Business of Fashion

Product Development (Final Project)

A. Product Development

1. Writing a design brief
2. Conducting product research
3. Mind mapping
4. Writing a design specification
5. Generating design ideas
6. Selecting a final idea
7. Justifying the final idea
8. Production of prototype
9. Evaluate and modify product
10. Writing a product specification
11. Final production
12. Product testing and evaluating

B. Marketing

1. Price, Place, Promotion, and Product (Marketing Mix)
2. Advertising and Media
3. Product Display
4. Branding and Labeling

C. Packaging



# Family and Consumer Sciences Education 2009 Standards Review



1. The Functions
2. Primary and Secondary
3. The Environment

*\* May be taught in another FACS Course*

ID- Interior Design

## Key to Standards

Items labeled (N.number.number) are National FACS Standards and Competencies.

Items labeled (Nra.number.number) are National FACS Reasoning for Action Standards.

National Standards for Family and Consumer Sciences Education 2008 [www.aafcs.org/FCStandards/](http://www.aafcs.org/FCStandards/)

**Fashion Design and Merchandising**

<b>Career Cluster/Cluster Grouping:</b>	<b>Arts, A/V Technology and Communications</b>
<b>Pathway(s):</b>	<b>Visual &amp; Design Arts</b>
<b>Prepared Completer Competencies:</b> (N16.0) Integrate knowledge, skills, and practices required for careers in textiles and apparels.	
<b>High School Expectations</b>	
<b>Concepts and skills students know include:</b> (N16.1) Analyze career paths within textile apparel and design industries.	
<b>Evidence Outcomes - Students can:</b>	<b>21<sup>st</sup> Century Skills and Readiness Competencies</b>
<p>(N16.1.1) Explain the roles and functions of individuals engaged in textiles and apparel careers. (PWR2.7.f) (RWC01.07.b, RWC02.02.d, RWC02.05.a, RWC03.03.a, RWC04.06.c, RWC04.06.d)</p> <p>(N16.1.2) Analyze opportunities for employment and entrepreneurial endeavors. (PWR2.7.f) (RWC03.03.a, RWC04.06.c, RWC04.06d, RWC04.10.c) (VIA04.03.b)</p> <p>(N16.1.3) Summarize education and training requirements and opportunities for career paths in textile and apparel services. (RWC01.07.b, RWC03.03.a, RWC04.06.c, RWC04.06d) (VIA04.03.b, VIA04.03.c)</p> <p>(N16.1.4) Analyze the effects of textiles and apparel occupations on local, state, national, and global economies. (PWR2.4.c) (RWC04.06.c, RWC04.06d)</p> <p>(N16.1.5) Create an employment portfolio for use with applying for internships, work-based learning opportunities and employment in textiles, fashion, and apparel. (RWC03.03.a, RWC03.12.d, RWC04.06.c, RWC04.06.d) (VIA04.03.c)</p>	<p><b>Academic Content Knowledge Alignment:</b></p> <p>RWC01.07.b - Oral Expression and Listening - Oral presentations require effective preparation strategies - Use verbal and nonverbal techniques to communicate information.</p> <p>RWC02.02.d - Reading for All Purposes - Interpreting and evaluating complex informational texts require the understanding of rhetoric, critical reading, and analysis skills - Explain and interpret the visual components supporting the text (maps, complex tables and diagrams, and transitional devices, such as use of white space).</p> <p>RWC02.05.a - Reading for All Purposes - Literary and historical influences determine the meaning of traditional and contemporary literary texts - Generalize about universal themes, cultural or historical perspectives from multiple texts.</p> <p>RWC03.03.a - Writing and Composition - Standard English conventions effectively communicate to targeted audiences and purposes - Follow the conventions of Standard English to write varied, strong, correct, complete sentences.</p>

<p>(N16.1.6) Analyze the role of professional organizations in textiles, fashion, and apparel industries. (RWC03.03.a, RWC04.06.c, RWC04.06d)</p>	<p>RWC03.12.d - Writing and Composition - Writing for grammar, usage, mechanics, and clarity requires ongoing refinements and revisions - Use various reference tools to vary word choice and make sure words are spelled correctly.</p> <p>RWC04.06.c - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Identify and evaluate potential sources of information for accuracy, reliability, validity, and timeliness.</p> <p>RWC04.06.d - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Use a variety of strategies (such as search engines, online databases, interview) to collect and organize relevant and significant information.</p> <p>RWC04.10.c - Research and Reasoning - Effective problem-solving strategies require high-quality reasoning - Implement a purposeful and articulated process to solve a problem.</p> <p>VIA04.03.b-Visual Arts, Relate and Connect to Transfer, Art is a lifelong endeavor - Research the range of careers available to artists such as museum curation, automobile design, gaming design, medical illustration, and photojournalism.</p> <p>VIA04.03.c – Visual Arts, Relate and Connect to Transfer, Art is a lifelong endeavor – Outline required training for one’s individual career goals.</p>
	<p><b>Learning &amp; Behavioral Skills (Inquiry, Application in Society &amp; Technology &amp; Nature of...):</b></p> <p>PWR2.7.f-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Personal Responsibility - Demonstrate awareness of and evaluate career options.</p> <p>PWR2.4.c-Postsecondary &amp; Workforce Readiness, Learning and</p>

	Behavior Skills, Global and Cultural Awareness-Recognize the interdependent nature of our world.
<b>Concepts and skills students know include:</b> (N16.2) Evaluate fiber and textile products and materials.	
<b>Evidence Outcomes - Students can:</b>	<b>21<sup>st</sup> Century Skills and Readiness Competencies</b>
<p>(N16.2.1) Apply appropriate terminology for identifying, comparing, and analyzing the most common generic textile fibers. (RWC01.04.c, RWC02.02.a, RWC02.05.d, RWC03.03.a, RWC03.12.d) (SCI01.02.b, SCI01.02.d)</p> <p>(N16.2.2) Evaluate performance characteristics of textile fiber and fabrics. (PWR2.1.a) (RWC03.03.a, RWC03.12.d) (SCI01.02.b, SCI01.02.d, SCI01.03.b, SCI01.03.c)</p> <p>(N16.2.3) Summarize textile legislation, standards, and labeling in the global economy. (RWC02.02.c, RWC03.03.a, RWC04.06.c, RWC04.06.d) (SCI03.05.a, SCI03.05.b)</p> <p>(N16.2.4) Analyze effects of textile characteristics on design, construction, care, use, and maintenance of products. (RWC03.03.a, RWC04.06.d) (SCI01.02.b, SCI01.02.d, SCI03.05.b)</p> <p>(N16.2.5) Apply appropriate procedures for care of textile products.</p>	<b>Academic Content Knowledge Alignment:</b>  RWC01.04.c - Oral Expression and Listening - Validity of a message is determined by its accuracy and relevance - Evaluate effectiveness of oral delivery techniques.  RWC02.02.a - Reading for All Purposes - Interpreting and evaluating complex informational texts require the understanding of rhetoric, critical reading, and analysis skills - Use reading and note-taking strategies (outlining, mapping systems, skimming, scanning, key word search) to organize information and make connections within and across informational texts.  RWC02.02.c - Reading for All Purposes - Interpreting and evaluating complex informational texts require the understanding of rhetoric, critical reading, and analysis skills - Obtain and use information from text and text features (index, bold or italicized text, subheadings, graphics) to answer questions, perform specific tasks, or identify and solve problems.  RWC02.05.d - Reading for All Purposes - Literary and historical influences determine the meaning of traditional and contemporary literary texts - Analyze how literary components affect meaning.  RWC03.03.a - Writing and Composition - Standard English conventions effectively communicate to targeted audiences and purposes - Follow the conventions of Standard English to write

	<p>varied, strong, correct, complete sentences.</p> <p>RWC03.12.d - Writing and Composition - Writing for grammar, usage, mechanics, and clarity requires ongoing refinements and revisions - Use various reference tools to vary word choice and make sure words are spelled correctly.</p> <p>RWC04.06.c - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Identify and evaluate potential sources of information for accuracy, reliability, validity, and timeliness.</p> <p>RWC04.06.d - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Use a variety of strategies (such as search engines, online databases, interview) to collect and organize relevant and significant information.</p> <p>SCI01.02.b - Physical Science - Matter has definite structure that determines characteristic physical and chemical properties - Gather, analyze and interpret data on chemical and physical properties of elements such as density, melting point, boiling point, and conductivity.</p> <p>SCI01.02.d - Physical Science - Matter has definite structure that determines characteristic physical and chemical properties - Develop a model that differentiates atoms and molecules, elements and compounds, and pure substances and mixtures.</p> <p>SCI01.03.b - Physical Science - Matter can change form through chemical or nuclear reactions abiding by the laws of conservation of mass and energy - Predict reactants and products for different types of chemical and nuclear reactions.</p> <p>SCI01.03.c - Physical Science - Matter can change form through chemical or nuclear reactions abiding by the laws of conservation of mass and energy - Predict and calculate the amount of products</p>
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	<p>produced in a chemical reaction based on the amount of reactants.</p> <p>SCI01.05.b - Physical Science - Energy exists in many forms such as mechanical, chemical, electrical, radiant, thermal, and nuclear, that can be quantified and experimentally determined - Use appropriate measurements, equations and graphs to gather, analyze, and interpret data on the quantity of energy in a system or an object.</p> <p>SCI03.05.a - Earth Science - There are costs, benefits, and consequences of exploration, development, and consumption of renewable and nonrenewable resources - Develop, communicate, and justify an evidence-based scientific explanation regarding the costs and benefits of exploration, development, and consumption of renewable and nonrenewable resources.</p> <p>SCI03.05.b - Earth Science - There are costs, benefits, and consequences of exploration, development, and consumption of renewable and nonrenewable resources - Evaluate positive and negative impacts on the geosphere, atmosphere, hydrosphere, and biosphere in regards to resource use.</p> <p><b>Learning &amp; Behavioral Skills (Inquiry, Application in Society &amp; Technology &amp; Nature of...):</b></p> <p>PWR2.1.a-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Critical Thinking and Problem Solving - Apply logical reasoning and analytical skills.</p>
<p><b>Concepts and skills students know include:</b> (N16.3) Demonstrate fashion, apparel, and textile design skills.</p>	
<p><b>Evidence Outcomes - Students can:</b></p>	<p><b>21<sup>st</sup> Century Skills and Readiness Competencies</b></p>
<p>(N16.3.1) Explain the ways in which fiber, fabric, texture, pattern, and finish can affect visual appearance. (PWR2.3.b) (RWC01.07.b, RWC02.02.d, RWC03.03.a, RWC04.06.c, RWC04.06.d)</p>	<p><b>Academic Content Knowledge Alignment:</b></p> <p>MAT01.02.a - Number Sense, Properties, and Operations - Formulate, represent, and use algorithms with real numbers flexibly, accurately, and efficiently. - Use appropriate computation methods</p>

(N16.3.2) Apply basic and complex color schemes and color theory to develop and enhance visual effects. (PWR2.1.a, PWR2.3.b)

(N16.3.3) Utilize elements and principles of design in designing, constructing, and/or altering textile, apparel, and fashion products. (MAT01.02.a) (PWR2.3.b) (VIA04.02.a)

(N16.3.4) Demonstrate design concepts with fabric or technology/computer, using draping and/or flat pattern making technique. (MAT04.02.b, MAT04.02.d) (PWR2.1.a) (VIA04.02.a)

(N16.3.5) Generate design that takes into consideration ecological, environmental, sociological, psychological, technical, and economic trends and issues. (PWR2.3.b) (SCI03.05.a, SCI03.05.b, SCI03.05.c, SCI03.05.d)

(N16.3.6) Apply elements and principles of design to assist consumers and businesses in making decisions. (PWR2.1.a)

(N16.3.7) Demonstrate ability to use technology for fashion, apparel, and textile design. (PWR2.2.a) (RWC3.04.d)

that encompass estimation and calculation.

MAT04.02.b - Shape, Dimension, and Geometric Relationships - Objects in the plane and their parts, attributes, and measurements can be analyzed deductively - Solve for unknown attributes of geometric shapes based on their congruence, similarity, or symmetry.

MAT04.02.d - Shape, Dimension, and Geometric Relationships - Objects in the plane and their parts, attributes, and measurements can be analyzed deductively - Develop conjectures and solve problems about geometric figures including definitions and properties (congruence, similarity, and symmetry). Justify these conjectures using two-column proofs, paragraph proofs, flow charts, or illustrations.

RWC01.07.b - Oral Expression and Listening - Oral presentations require effective preparation strategies - Use verbal and nonverbal techniques to communicate information.

RWC02.02.d - Reading for All Purposes - Interpreting and evaluating complex informational texts require the understanding of rhetoric, critical reading, and analysis skills - Explain and interpret the visual components supporting the text (maps, complex tables and diagrams, and transitional devices, such as use of white space).

RWC03.03.a - Writing and Composition - Standard English conventions effectively communicate to targeted audiences and purposes - Follow the conventions of Standard English to write varied, strong, correct, complete sentences.

RWC04.06.c - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Identify and evaluate potential sources of information for accuracy, reliability, validity, and timeliness.

RWC04.06.d - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a

	<p>question, propose solutions, or share findings and conclusions - Use a variety of strategies (such as search engines, online databases, interview) to collect and organize relevant and significant information.</p> <p>SCI03.05.a - Earth Science - There are costs, benefits, and consequences of exploration, development, and consumption of renewable and nonrenewable resources - Develop, communicate, and justify an evidence-based scientific explanation regarding the costs and benefits of exploration, development, and consumption of renewable and nonrenewable resources.</p> <p>SCI03.05.b - Earth Science - There are costs, benefits, and consequences of exploration, development, and consumption of renewable and nonrenewable resources - Evaluate positive and negative impacts on the geosphere, atmosphere, hydrosphere, and biosphere in regards to resource use.</p> <p>SCI03.05.c - Earth Science - There are costs, benefits, and consequences of exploration, development, and consumption of renewable and nonrenewable resources - Create a plan to reduce environmental impacts due to resource consumption.</p> <p>SCI03.05.d - Earth Science - There are costs, benefits, and consequences of exploration, development, and consumption of renewable and nonrenewable resources - Analyze and interpret data about the effect of resource consumption and development on resource reserves to draw conclusions about sustainable use.</p> <p>VIA04.02.a-Visual Arts, Relate and Connect to Transfer, Communication through advanced visual methods is a necessary skill in everyday life - Use sketches, plans, and models to create and/or design a functioning work of art.</p>
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	<p><b>Learning &amp; Behavioral Skills (Inquiry, Application in Society &amp; Technology &amp; Nature of...):</b></p> <p>PWR2.1.a-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Critical Thinking and Problem Solving - Apply logical reasoning and analytical skills.</p> <p>PWR2.2.a-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Find and Use Information/Information Technology - Select, integrate, and apply appropriate technology to access and evaluate new information.</p> <p>PWR2.3.b-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Creativity and Innovation - Generate, evaluate, and implement new ideas and novel approaches.</p>
<p><b>Concepts and skills students know include:</b> (N16.4) Demonstrate skills needed to produce, alter, or repair fashion, apparel, and textile products.</p>	
<p><b>Evidence Outcomes - Students can:</b></p>	<p><b>21<sup>st</sup> Century Skills and Readiness Competencies</b></p>
<p>(N16.4.1) Demonstrate professional skills in using a variety of equipment, tools, and supplies for fashion, apparel, and textile construction, alteration, and repair. (MAT04.02.d) (PWR2.1.a) (RWC02.02.c, RWC02.05.d)</p> <p>(N16.4.2) Explain production processes for creating fibers, yarn, woven, and knit fabrics, and non-woven textile products. (RWC01.07.b, RWC03.03.a, RWC04.06.c, RWC04.06.d)</p> <p>(N16.4.3) Use appropriate industry products and materials for cleaning, pressing, and finishing textile, apparel, and fashion products.</p> <p>(N16.4.4) Analyze current technology and trends that facilitate design and production of textile, apparel, and fashion products. (PWR.2.2.a) (RWC03.03.a, RWC04.06.c, RWC04.06.d,</p> <p>(N16.4.5) Demonstrate basic skills for producing and altering textile products and apparel. (MAT04.02.d) (PWR2.1.a) (RWC02.02.c)</p>	<p><b>Academic Content Knowledge Alignment:</b></p> <p>MAT04.02.d - Shape, Dimension, and Geometric Relationships - Objects in the plane and their parts, attributes, and measurements can be analyzed deductively - Develop conjectures and solve problems about geometric figures including definitions and properties (congruence, similarity, and symmetry). Justify these conjectures using two-column proofs, paragraph proofs, flow charts, or illustrations.</p> <p>RWC01.07.b - Oral Expression and Listening - Oral presentations require effective preparation strategies - Use verbal and nonverbal techniques to communicate information.</p> <p>RWC02.02.c - Reading for All Purposes - Interpreting and evaluating complex informational texts require the understanding of rhetoric, critical reading, and analysis skills - Obtain and use information from text and text features (index, bold or italicized text, subheadings,</p>

graphics) to answer questions, perform specific tasks, or identify and solve problems.

RWC02.05.b - Reading for All Purposes - Literary and historical influences determine the meaning of traditional and contemporary literary texts - Evaluate the contribution to society made by traditional, classic, and contemporary works of literature that deal with similar topics and problems.

RWC03.03.a - Writing and Composition - Standard English conventions effectively communicate to targeted audiences and purposes - Follow the conventions of Standard English to write varied, strong, correct, complete sentences.

RWC04.06.c - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Identify and evaluate potential sources of information for accuracy, reliability, validity, and timeliness.

RWC04.06.d - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Use a variety of strategies (such as search engines, online databases, interview) to collect and organize relevant and significant information.

**Learning & Behavioral Skills (Inquiry, Application in Society & Technology & Nature of...):**

PWR2.1.a-Postsecondary & Workforce Readiness, Learning and Behavior Skills, Critical Thinking and Problem Solving - Apply logical reasoning and analytical skills.

PWR2.2.a-Postsecondary & Workforce Readiness, Learning and Behavior Skills, Find and Use Information/Information Technology - Select, integrate, and apply appropriate technology to access and evaluate new information.

Concepts and skills students know include: (N16.5) Evaluate elements of textile, apparel, and fashion merchandising.	
Evidence Outcomes - Students can:	21 <sup>st</sup> Century Skills and Readiness Competencies
<p>(N16.5.1) Apply marketing strategies for textile, apparel, and fashion products. (RWC3.03.a)</p> <p>(N16.5.2) Analyze the cost of constructing, manufacturing, altering, or repairing textile, apparel, and fashion products. (MAT01.2.a) (RWC3.03.a)</p> <p>(N16.5.3) Analyze ethical considerations for merchandising apparel and textile products. (PWR2.2.b) (RWC02.04.e, RWC3.03.a, RWC04.06.c, RWC04.06.d)</p> <p>(N16.5.4) Apply external factors that influence merchandising. (RWC02.04.e, RWC3.03.a)</p> <p>(N16.5.5) Critique varied methods for promoting apparel and textile products. (PWR2.1.e) (RWC04.06.d, RWC3.03.a)</p> <p>(N16.5.6) Apply research methods, including forecasting techniques, for marketing apparel and textile products. (MAT03.1.a, MAT03.1.b, MAT03.1.c, MAT03.2.a, MAT03.3.a, MAT03.3.c, MAT03.4.a) (PWR2.1.b) (RWC02.02.a, RWC02.02.d, RWC02.04.e, RWC02.04.b, RW04.06.d, RWC04.03.a, RWC04.03.c, RWC04.03.d, RWC04.02.a)</p>	<p><b>Academic Content Knowledge Alignment:</b></p> <p>MAT01.02.a - Number Sense, Properties, and Operations - Formulate, represent, and use algorithms with real numbers flexibly, accurately, and efficiently. - Use appropriate computation methods that encompass estimation and calculation.</p> <p>MAT03.01.a - Data Analysis, Statistics, and Probability - Statistical methods take variability into account, supporting informed decision-making through quantitative studies designed to answer specific questions - Formulate appropriate research questions that can be answered with statistical analysis.</p> <p>MAT03.01.b - Data Analysis, Statistics, and Probability - Statistical methods take variability into account, supporting informed decision-making through quantitative studies designed to answer specific questions - Determine appropriate data collection methods to answer a research question.</p> <p>MAT03.01.c - Data Analysis, Statistics, and Probability - Statistical methods take variability into account, supporting informed decision-making through quantitative studies designed to answer specific questions - Explain how data might be analyzed to provide answers to a research question.</p> <p>MAT03.02.a - Data Analysis, Statistics, and Probability - The design of an experiment or sample survey is of critical importance to analyzing the data and drawing conclusions - Identify the characteristics of a well-designed and well-conducted survey.</p> <p>MAT03.03.a - Data Analysis, Statistics, and Probability - Visual displays and summary statistics condense the information in data sets into usable knowledge - Identify and choose appropriate ways to summarize numerical or categorical data using tables, graphical</p>

	<p>displays, and numerical summary statistics (describing shape, center and spread) and accounting for outliers when appropriate.</p> <p>MAT03.03.c - Data Analysis, Statistics, and Probability - Visual displays and summary statistics condense the information in data sets into usable knowledge - Describe the relationship between two categorical variables using percents.</p> <p>MAT03.04.a - Data Analysis, Statistics, and Probability - Randomness is the foundation for using statistics to draw conclusions when testing a claim or estimating plausible values for a population characteristic - Define and explain the meaning of significance (both practical and statistical).</p> <p>RWC02.02.a - Reading for All Purposes - Interpreting and evaluating complex informational texts require the understanding of rhetoric, critical reading, and analysis skills - Use reading and note-taking strategies (outlining, mapping systems, skimming, scanning, key word search) to organize information and make connections within and across informational texts.</p> <p>RWC02.02.d - Reading for All Purposes - Interpreting and evaluating complex informational texts require the understanding of rhetoric, critical reading, and analysis skills - Explain and interpret the visual components supporting the text (maps, complex tables and diagrams, and transitional devices, such as use of white space).</p> <p>RWC02.04.b - Reading for All Purposes - Ideas synthesized from informational texts serve a specific purpose - Make generalizations and draw conclusions from persuasive texts, citing text-based evidence as support.</p> <p>RWC02.04.e - Reading for All Purposes - Ideas synthesized from informational texts serve a specific purpose - Explain nuances and connotations of particular words and sentences, and draw conclusions about author's intent as well as potential impact on an audience.</p> <p>RWC03.03.a - Writing and Composition - Standard English</p>
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	<p>conventions effectively communicate to targeted audiences and purposes - Follow the conventions of Standard English to write varied, strong, correct, complete sentences.</p> <p>RWC04.02.a - Research and Reasoning - Logical arguments distinguish facts from opinions, and evidence defines reasoned judgment – Synthesize information to support a logical argument.</p> <p>RWC04.03.a - Research and Reasoning - Self-designed research provides insightful information, conclusions, and possible solutions - Define and narrow a topic for research (thesis statement, hypothesis, research question) to address a specific purpose and audience.</p> <p>RWC04.03.c - Research and Reasoning - Self-designed research provides insightful information, conclusions, and possible solutions - Evaluate quality, accuracy, and completeness of information and the bias, credibility and reliability of the sources.</p> <p>RWC04.03.d - Research and Reasoning - Self-designed research provides insightful information, conclusions, and possible solutions - Use a variety of strategies (e.g technical reading, direct observation, survey development) to collect relevant information to support the thesis/research question and explain why specific strategies were used instead of others.</p> <p>RWC04.06.c - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Identify and evaluate potential sources of information for accuracy, reliability, validity, and timeliness.</p> <p>RWC04.06.d - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Use a variety of strategies (such as search engines, online databases, interview) to collect and organize relevant and significant information.</p>
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	<p><b>Learning &amp; Behavioral Skills (Inquiry, Application in Society &amp; Technology &amp; Nature of...):</b></p> <p>PWR2.1.b-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Critical Thinking and Problem Solving - Conduct research using acceptable research methods.</p> <p>PWR2.1.e-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Critical Thinking and Problem Solving - Evaluate the credibility and relevance of information, ideas, and arguments.</p> <p>PWR2.2.b-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Find and Use Information/Information Technology - Understand the ethical uses of information.</p>
<p><b>Concepts and skills students know include:</b> (N16.6) evaluate the components of customer service.</p>	
<p><b>Evidence Outcomes - Students can:</b></p>	<p><b>21<sup>st</sup> Century Skills and Readiness Competencies</b></p>
<p>(N16.6.1) Analyze factors that contribute to quality customer relations. (RW04.06.d, RWC03.03.a, RWC04.04.b, RWC04.06.c, RWC04.06.d)</p> <p>(N16.6.2) Analyze the influences of cultural diversity as a factor in customer relations. (RWC04.06.d,RWC3.03.a, RWC4.04.b, RWC04.06.c, RWC04.06.d, RWC4.08.b)</p> <p>(N16.6.3) Demonstrate the skills necessary for quality customer service. (PWR2.8.a) (RWC01.1.e, RWC01.3.a, RWC01.7.b)</p> <p>(N16.6.4) Create solutions to address customer concerns. (RWC3.03.a, RWC04.10.c)</p>	<p><b>Academic Content Knowledge Alignment:</b></p> <p>RWC01.01.e - Oral Expression and Listening - Effective speaking in formal and informal settings requires appropriate use of methods and audience awareness - Choose specific words and word order for intended effect and meaning.</p> <p>RWC01.03.a - Oral Expression and Listening - Verbal and nonverbal cues impact the intent of communication - Give informal talks using an appropriate level of formality of verbal language and nonverbal interaction with audience.</p> <p>RWC01.07.b - Oral Expression and Listening - Oral presentations require effective preparation strategies - Use verbal and nonverbal techniques to communicate information.</p> <p>RWC03.03.a - Writing and Composition - Standard English conventions effectively communicate to targeted audiences and purposes - Follow the conventions of Standard English to write</p>

	<p>varied, strong, correct, complete sentences.</p> <p>RWC04.04.b - Research and Reasoning - Complex situations require critical thinking across multiple disciplines - Evaluate strengths and weaknesses of their logic and logic of others by using criteria including relevance, clarity, accuracy, fairness, significance, depth, breadth, logic and precision.</p> <p>RWC04.06.c - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Identify and evaluate potential sources of information for accuracy, reliability, validity, and timeliness.</p> <p>RWC04.06.d - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Use a variety of strategies (such as search engines, online databases, interview) to collect and organize relevant and significant information.</p> <p>RWC04.08.b - Research and Reasoning - Informational materials, including electronic sources, need to be collected, evaluated, and analyzed for accuracy, relevance, and effectiveness for answering research questions - Integrate information from different sources to form conclusions about an author's assumptions, biases, credibility, cultural and social perspectives, or world views.</p> <p>RWC04.10.c - Research and Reasoning - Effective problem-solving strategies require high-quality reasoning - Implement a purposeful and articulated process to solve a problem.</p> <p><b>Learning &amp; Behavioral Skills (Inquiry, Application in Society &amp; Technology &amp; Nature of...):</b></p> <p>PWR2.8.a-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Communication - Read, write, listen and speak effectively.</p>
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<b>Concepts and skills students know include:</b> (N16.7) Demonstrate general operational procedures required for business profitability and career success.	
<b>Evidence Outcomes - Students can:</b>	<b>21<sup>st</sup> Century Skills and Readiness Competencies</b>
<p>(N16.7.1) Analyze legislation, regulations, and public policy affecting the textiles, apparel, and fashion industries. (RWC3.03.a, RWC04.06.c, RWC04.06.d)</p> <p>(N16.7.2) Analyze personal and employer responsibilities and liabilities regarding industry-related safety, security, and environmental factors. (RWC3.03.a, RWC04.06.c, RWC04.06.d, RWC04.10.c)</p> <p>(N16.7.5) Analyze operational costs such as mark ups, mark downs, cash flow, and other factors affecting profit. (MAT02.3.b) (RWC3.03.a, RWC04.06.c, RWC04.06.d, RWC04.10.c)</p> <p>(N16.7.6) Demonstrate knowledge of the arts, of various resources, and cultural impact upon the textile, apparel, and fashion industries. (PWR2.4.a) (RWC01.01.c, RWC01.07.b, RWC02.02.a, RWC3.03.a, RWC04.06.c, RWC04.06.d, RWC4.08.a)</p>	<p><b>Academic Content Knowledge Alignment:</b></p> <p>MAT02.03.b - Patterns, Functions, and Algebraic Structures - Parameters influence the shape of the graphs of functions - Interpret the results of these transformations verbally, graphically, and symbolically.</p> <p>RWC01.01.c - Oral Expression and Listening - Effective speaking in formal and informal settings requires appropriate use of methods and audience awareness - Use examples, illustrations, graphics, quotations, analogies, facts, and statistics to focus and support the content of a presentation.</p> <p>RWC01.07.b - Oral Expression and Listening - Oral presentations require effective preparation strategies - Use verbal and nonverbal techniques to communicate information.</p> <p>RWC02.02.a - Reading for All Purposes - Interpreting and evaluating complex informational texts require the understanding of rhetoric, critical reading, and analysis skills - Use reading and note-taking strategies (outlining, mapping systems, skimming, scanning, key word search) to organize information and make connections within and across informational texts.</p> <p>RWC03.03.a - Writing and Composition - Standard English conventions effectively communicate to targeted audiences and purposes - Follow the conventions of Standard English to write varied, strong, correct, complete sentences.</p> <p>RWC04.06.c - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Identify and evaluate potential sources of information for accuracy, reliability, validity, and timeliness.</p>

	<p>RWC04.06.c - Research and Reasoning - Collect, analyze, and evaluate information obtained from multiple sources to answer a question, propose solutions, or share findings and conclusions - Identify and evaluate potential sources of information for accuracy, reliability, validity, and timeliness.</p> <p>RWC04.08.a - Research and Reasoning - Informational materials, including electronic sources, need to be collected, evaluated, and analyzed for accuracy, relevance, and effectiveness for answering research questions - Integrate information from different sources to research and complete a project.</p> <p>RWC04.10.c - Research and Reasoning - Effective problem-solving strategies require high-quality reasoning - Implement a purposeful and articulated process to solve a problem.</p> <p><b>Learning &amp; Behavioral Skills (Inquiry, Application in Society &amp; Technology &amp; Nature of...):</b></p> <p>PWR2.4.a-Postsecondary &amp; Workforce Readiness, Learning and Behavior Skills, Global and Cultural Awareness - Appreciate the arts, culture, and humanities.</p>
<p><b>Concepts and skills students know include:</b> (Nra2) Analyze recurring and evolving family, workplace, and community concerns.</p>	
<p><b>Evidence Outcomes - Students can:</b></p>	<p><b>21<sup>st</sup> Century Skills and Readiness Competencies</b></p>
<p>(Nra2.2) Describe recurring and evolving concerns facing individuals, families, workplaces, and communities. (RWC04.10.c)</p> <p>(Nra2.4) Describe levels of concerns: individual, family, workplace, community, cultural/societal, global/environmental. (RWC04.10.c)</p>	<p><b>Academic Content Knowledge Alignment:</b></p> <p>RWC04.10.c - Research and Reasoning - Effective problem-solving strategies require high-quality reasoning - Implement a purposeful and articulated process to solve a problem.</p>
	<p><b>Learning &amp; Behavioral Skills (Inquiry, Application in Society &amp; Technology &amp; Nature of...):</b></p>

<b>Concepts and skills students know include:</b> (Nra4) Implement practical reasoning for responsible action in families, workplaces, and communities.	
<b>Evidence Outcomes - Students can:</b>	<b>21<sup>st</sup> Century Skills and Readiness Competencies</b>
<p>(Nra4.4) Establish standards for choosing responsible action to address a particular concern. (RWC04.04.c)</p> <p>(Nra4.5) Evaluate the conditions of a particular concern, e.g. historical, social-psychological, socioeconomic, political, cultural, global/environmental. (RWC04.10.c)</p> <p>(Nra4.7) Use adequate and reliable information to critique possible actions. (RWC04.03.c, RWC04.10.c)</p> <p>(Nra4.11) Design a plan for accomplishing a selected action. (RWC04.04.c, RWC04.10.c)</p>	<p><b>Academic Content Knowledge Alignment:</b></p> <p>RWC04.03.c - Research and Reasoning - Self-designed research provides insightful information, conclusions, and possible solutions - Evaluate quality, accuracy, and completeness of information and the bias, credibility and reliability of the sources.</p> <p>RWC04.04.c - Research and Reasoning - Complex situations require critical thinking across multiple disciplines - Determine the extent to which they entered empathetically into competing points of view, exercised confidence in reason, recognized the limits of their knowledge on the topic (intellectual humility), explored alternative approaches to solving or addressing complex problems (intellectual flexibility), and were open to constructive critique (intellectual open-mindedness)</p> <p>RWC04.10.c - Research and Reasoning - Effective problem-solving strategies require high-quality reasoning - Implement a purposeful and articulated process to solve a problem.</p>
	<b>Learning &amp; Behavioral Skills (Inquiry, Application in Society &amp; Technology &amp; Nature of...):</b>