

Textile Science (2013)

Demonstrate employability skills required by business and industry. HUM-TS-1

- 1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.** HUM-TS-1.1
- 2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.** HUM-TS-1.2
- 3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.** HUM-TS-1.3
- 4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.** HUM-TS-1.4
- 5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.** HUM-TS-1.5
- 6 Present a professional image through appearance, behavior and language.** HUM-TS-1.6

Examine the various career opportunities within the textile industry. HUM-TS-2

- 1 Research and evaluate careers where knowledge of textile sciences is required or valuable.** HUM-TS-2.1
- 2 Analyze the future employment outlook in the textile industry.** HUM-TS-2.2
- 3 Describe levels of employment and entrepreneurial opportunities in the textile industry and local sources of employment information.** HUM-TS-2.3
- 4 Determine continuing-education opportunities that enhance career advancement.** HUM-TS-2.4

- 1 Examine the construction and use of textiles from antiquity to the industrial revolution.** HUM-TS-3.1

Develop a general knowledge of textiles from a historical perspective to current applications. HUM-TS-3

- 3 Develop a general knowledge of textiles from a historical perspective to current applications.** HUM-TS-3

Investigate, describe and recognize fiber characteristics and properties. HUM-TS-4

2 Examine the construction and use of textiles from the industrial revolution through the 21st century. HUM-TS-3.2

1 Analyze and identify natural and man-made fibers. HUM-TS-4.1

2 Investigate aesthetic features, mechanical properties, and chemical properties of all fibers. HUM-TS-4.2

3 Demonstrate fiber identification by burning. HUM-TS-4.4

Examine and identify the fabrication and properties of yarns. HUM-TS-5

1 Analyze and identify simple and complex yarns. HUM-TS-5.1

2 Investigate aesthetic features, mechanical properties, and chemical properties of all yarn constructions. HUM-TS-5.2

3 Identify textured yarns and describe the effect on fabrics. HUM-TS-5.3

4 Differentiate yarns within fabric structures. HUM-TS-5.4

Examine and identify the fabrication and properties of yarns. HUM-TS-6

1 Identify woven fabrics and determine use for apparel and/or interiors. HUM-TS-6.1

2 Identify non-woven fabrics and the most appropriate use for apparel and/or interiors. HUM-TS-6.2

3 Identify knitted fabrics and the most appropriate use for apparel and/or interiors. HUM-TS-6.3

4 Identify the origin of all fabrics, including Animal (Sheep) wool, and Insects (Worms) silks. HUM-TS-6.4

Demonstrate an understanding of textile finishes and methods. HUM-TS-7

1 Compare and contrast mechanical, chemical, and functional finishes. HUM-TS-7.1

2 Demonstrate and identify fiber finishes through swatch tests, and the importance, if fabrics are not tested correctly, can create huge problems with the end product. HUM-TS-7.2

3 Compare and contrast printing and dyeing methods. HUM-TS-7.3

4 Demonstrate and identify printing and dyeing method. HUM-TS-7.4

5 Identify the different results you can achieve printing and dyeing natural and synthetic fibers. HUM-TS-7.5

Analyze the characteristics and maintenance concepts of textile products. HUM-TS-8

1 Research various testing methods for textiles. HUM-TS-8.1

2 Read and interpret textile labels used for interiors and apparel. HUM-TS-8.2

3 Discuss current environmental issues relevant to the textile industry. HUM-TS-8.3

Distinguish the characteristics and identify the appropriate use of textiles for apparel and/or interiors. HUM-TS-9

- 1 Evaluate common textiles used for interiors.** HUM-TS-9.1
- 2 Evaluate common textiles used for apparel.** HUM-TS-9.2
- 3 Evaluate common textiles used for industrial applications.** HUM-TS-9.3

Investigate how trends and color forecasting are used in the development of new products. HUM-TS-10

- 1 Investigate textile for interiors.** HUM-TS-10.1
- 2 Investigate textiles for apparel.** HUM-TS-10.2
- 3 Investigate textiles for industrial applications.** HUM-TS-10.3

Examine the continuing use of technology in advancing textile products using innovative skills and tests. HUM-TS-11

- 1 Discuss the role textiles play in sports equipment, (e.g., sweat absorbent finishes (wicking), antibacterial finishes).** HUM-TS-11.1
- 2 Identify how textiles are being used in the medical field.** HUM-TS-11.2
- 3 Discuss the careers that rely on wearing textiles, including uniforms to body armor.** HUM-TS-11.3

Research legislation on the federal, state and local levels that regulate the textile industry. HUM-TS-12

- 1 Analyze legislation, regulations, and public policy affecting the textile industry, including labeling laws.** HUM-TS-12.1
- 2 Analyze personal and employer responsibilities and liabilities regarding industry related safety, security, and environmental factors.** HUM-TS-12.2
- 3 Discuss the reason why most companies are manufacturing products overseas, and the affect that has on the United States.** HUM-TS-12.3