



Correlation of

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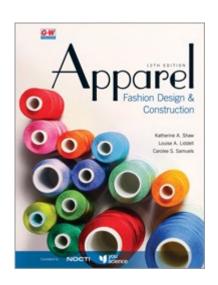
to

Precision Exams by YouScience

Goodheart-Willcox is pleased to partner with Precision Exams by YouScience by correlating *Apparel: Fashion Design & Construction* to their standards for Sewing Construction & Textiles III. Precision Exams standards and Career Skills Exams were created in concert with industry and subject matter experts to match realworld job skills and marketplace demands. Students that pass the exam and performance portion of the exam can earn a Career Skills Certification.

The correlation chart below lists the standards, objectives, and indicators for the Sewing Construction & Textiles III exam in the left column. Corresponding content from *Apparel: Fashion Design & Construction* that can be used by a student to help achieve the standard, objective, or indicator is listed in the right column.

For more information on Precision Exams by YouScience, including a complete listing of their 150+ Career Skills Exams and Certificates, please visit https://www.youscience.com/certifications/career-clusters/.



Standards / Objectives / Indicators	Textbook Pages
Standard 1: Students will analyze careers and explore the design industry.	
Objective 1: Research employment and entrepreneurial opportunities and preparation for interior and/or fashion design careers.	See the G-W text, Fashion Marketing & Merchandising 67-68
Indicator 1: Interior Design Careers:	
 a. Interior designer: make interior spaces functional, safe, and beautiful by determining space requirements and selecting decorative items, such as colors, lighting, and materials. 	

Standards / Objectives / Indicators	Textbook Pages
 b. Developer: plan, create, and present products for a specific market using knowledge of principles and elements of design, aesthetics, and technical skills. Work closely with design and technical teams. 	
c. Graphic Designer: create visual concepts, by hand or using computer software, to communicate ideas that inspire, inform, or captivate consumers. They develop the overall layout and production design for advertisements, brochures, magazines, and corporate reports.	
d. Art Directors: responsible for visual style and images in magazines, newspapers, product packaging, and movie and television productions. They create the overall design of a project and direct others who developed artwork and layouts.	
 e. Merchandise displayers/Window trimmers: creates fixtures and display stands for events such as large public exhibitions, conferences, trade shows and temporary displays for business, museums, libraries, and galleries. 	
 f. Fabricator: assemble finished products and parts that go into them. They use tools, machines, and their hands. 	
g. Entrepreneur: devise strategies and policies to ensure that an organization meets its goals. They plan, direct, and coordinate operational activities of companies and organizations.	
 h. Purchasing/Buyers: sources goods to be sold at retail stores or presented in showrooms. (e.g., flooring, upholstery, accessories) 	
Indicator 2: Fashion Design Careers	67, 108, 110, 444
 a. Fashion Designer: create original clothing, accessories, and footwear. They sketch designs, select fabrics and patterns, and give instructions on how to make the products they designed. 	67-68
 b. Developer: plan, create, and present products for a specific market using knowledge of principles and elements of design, aesthetics, and technical skills. Work closely with design and technical teams. 	
c. Purchasing/Buyers: sources goods to be sold at retail stores.(e.g clothing, accessories footwear, fabrics, notions)	70-71
d. Retail Sales: assist the customer in brick and mortar store to facilitate their purchase.	69-71
e. Costume Designer: a person who designs costumes for film, stage production, or television.	
f. Entrepreneur: devise strategies and policies to ensure that an organization meets its goals. They plan, direct, and coordinate operational activities of companies and organizations.	482-485
Objective 2: Identify knowledge and skills for selected careers in the interior and fashion design industries.	

Standards / Objectives / Indicators	Textbook Pages
Indicator 1: Employability/Soft Skills a. Organization	
b. Collaboration/teamwork	
c. Effective communication	
d. Values	
e. Self-representation (e.g appropriate language and dress,	
reliability, etc.) f. Critical thinking	
Indicator 2: Technical Skills	
a. Renderings (hand and digital)	
b. Reflection/Evaluation	
c. Client Services (assessing client needs and wants)	
d. Presentation (visual and oral)	
Standard 2: Students will identify technology used in fashion des	ign/interior design fabrication
Objective 1: Explore with basic design software.	308-309, 89-92, 223,
Indicator 1: Identify how CAD (Computer Aided Design) and Vector are used in the fashion and commercial design industry.	89-90, 107-108, 127
a. CAD: a program you use to create 2-D and 3-D shapes.	89-90, 107-108, 127
b. Vector: a graphic that can be scaled and layered in a drawing program.	
c. CAD and vector programs may be used together to create a complete design.	
Indicator 2: Understand what output files, outsourcing and pattern grading terms are in relationship to design software.	89-90
a. Output files: type of file that a digital document can be saved as.	90
b. Outsourcing: ability to share a file.	90
c. Pattern Grading: procedure for creating different sizes from a pattern without new measurements. (block/sloper)	89
Indicator 3: Compare commercial and personal use design software programs used in the fashion and commercial design industry.	
a. Commercial Design software: the license allows the user to design and sell the product. These programs cost more than personal design programs. Examples are: Adobe Illustrator, Browzwear, Fashion CAD, Gerber Accumark, Gemini Pattern Editor.	
b. Personal Design software: this product can only be used for personal use, not for resale. Examples are Adobe Illustrator, Design Sew, and Wild Ginger.	
Standard 3: Students will identify and choose appropriate fabrics based on fiber properties as it relates to an end product. (To be integrated throughout the course in various projects)	
Objective 1: Review and identify characteristics of natural fibers. Consider these fibers in interior and apparel applications.	47, 62-64, 78, 87-88, 95, 148-161, 357- 359, 378, 435,

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Standards / Objectives / Indicators	Textbook Pages
Indicator 1: Cotton: plant source - absorbent, comfortable, durable, wrinkles, shrinks, easy to launder.	151-152
Indicator 2: Linen: (flax) plant source - absorbent, natural luster, quick drying, wrinkles, frays, little stretch.	152-154
Indicator 3: Silk: (silkworm cocoon) animal source - absorbent, natural luster, insulating, strong, resilient, dyes well, expensive, degrades and yellows from age and sunlight.	49, 156-157
Indicator 4: Wool: (fur) animal source - absorbent, strong, elastic, fire retardant, shrinks when laundered improperly, wrinkle resistant, warm.	154-156
Objective 2: Review and identify characteristics of manufactured fibers. Consider these fibers in interior and apparel applications.	162-173
Indicator 1: General characteristics: made from chemical processes (some made from natural elements mixed with chemicals while other are made completely from non-natural substances)	162-173
Indicator 2: Nylon: synthetic - strong, elastic, water repellent, colorfast, frays easily.	55, 167
Indicator 3: Polyester: synthetic - good shape retention, easy to launder, wrinkle resistant, colorfast, blends well with other fibers, retains oily stains.	55, 167-168
Indicator 4: Acrylic: synthetic – resembles and is generally less expensive than wool, soft, warm, nonabsorbent, pills, heat sensitive, can shrink or stretch.	55, 165-166
Indicator 5: Lyocell: cellulosic - soft and comfortable, drapes beautifully, blends well with other fibers, wrinkles, dyes well, antibacterial.	55, 169
Indicator 6: Spandex: synthetic - very elastic, adds stretch when blended with other fibers, requires stretch stitching techniques, shrinks.	55, 169
Indicator 7: Olefin: synthetic - resists: abrasion, chemicals, stains, mildew, pilling, wrinkles, static. Excellent wicking and thermal warmth, poor dye ability.	55, 168, 171, 365
Objective 3: Review and identify various types of fabric finishes. Consider these fibers in interior and apparel applications.	196-207
Indicator 1: Fabric Finish: improves appearance, hand (feel) and/or performance of textiles.	200-204
Indicator 2: Stain resistant: makes fibers less absorbent, so it is easier to lift off or sponge away spills of food, water, and other substances.	203
Indicator 3: Fire resistant: prevents fabric from supporting or spreading a flame.	202
Indicator 4: Wrinkle resistant: helps fabric retain its original shape and resist wrinkling.	201

Standards / Objectives / Indicators	Textbook Pages
Indicator 5: Waterproof: fills the pores of a fabric, so water cannot pass through it.	203
Indicator 6: Water resistant: able to resist the penetration of water to some degree but not entirely.	203
Objective 4: Explore and identify performance textile technologies.	201-204
Indicator 1: Antimicrobial: a chemical is added to the solution before being extruded, which kills and inhibits the growth of microorganisms, such as bacteria viruses and fungi.	201
Indicator 2: Wicking: changing the cross-section of the fiber as it is extruded to mimic natural fiber properties, which draws moisture away from the body.	150
Objective 5: Examine the progression of ethical practices in the textile and apparel industry.	79, 81, 83-89, 93,94, 111,442, 456-457
Indicator 1: Explore and identify environmental sustainability practices in the textile and apparel industry.	64, 86-88, 165-166, 204
 a. Ethics: moral principles that govern a person's or group's behavior. 	84-89, 473
b. Sustainable product: meets the needs of the present while making sure future needs are met. Provides environmental, social, and economic benefits while protecting the health of the public and the planet.	86
c. Environmental Responsibility: The obligation that a company must operate in a way that protects the environment.	85-86
Indicator 2: Human ethical impact of fibers used in the industry.	64,204,
a. Fair Trade: a movement whose goal is to help producers in developing countries to get a fair price for their products. Fair trade helps to provide safe working conditions and improved livelihoods for workers around the world.	
i. USA Fair Trade Organization	
ii. World Fair Trade Organization	
iii. Rainforest Alliance	
Standard 4: Students will explore entrepreneurial options in the f	ashion and interior design industry
Objective 1: Students will explore the sequence of steps in establishing a business plan.	483-493, 488-489
Indicator 1: Introduction	65-66, 444-445, 450-453, 485, 489
a. Description of the business and its goals.	
i. Market research to determine demand for product.	
b. Ownership of the business and its legal structure.	
c. List the skills and experience you bring to the business.	
d. Advantages you and your business have over competitors.	

Standards / Objectives / Indicators	Textbook Pages
Indicator 2: Marketing	17, 65, 67-68, 69-70, 93, 113, 489-491
a. Promote products and services your company will offer.	
b. Customer demand for your products and services.	
c. Identify your market, its size and locations.	
 d. Explain how your products and services will be advertised and marketed. 	
e. Pricing strategy.	
Indicator 3: Finance & Management	489-490
 a. Expected return on investment and monthly cash flow for the first year. 	
b. Projected income statements.	
c. Discuss your break-even point.	
Indicator 4: Operations	489, 445-461, 462-479
a. Day-to-day operations.	
b. Hiring and personnel procedures.	
c. Insurance, lease or rent agreements.	
d. Equipment necessary to produce your goods or services.	
e. Production and delivery of products and services.	
Indicator 5: Concluding statement	489
a. Summarize your business goals and objectives and express your commitment to the success of your business. Once you have completed your business plan, review it with a friend or business associate and professional business counselor.	
b. Remember, the business plan is a flexible document that should change as your business grows.	489
Objective 2: Analyze how to determine production cost and MSRP (Manufacturer Suggested Retail Price) of a product.	489-491
Indicator 1: Production Costs	489-491
Material Costs: the amount of money you spend on raw materials needed to create a product.	489-491
b. Labor Costs: the number of hours required to make your product and the hourly rate associated with those hours.	489-491
c. Overhead Costs: any further expenses required for the operation of your business. (equipment, utilities, rent, insurance, taxes)	489-491
Indicator 2: MSRP (includes production costs and the following)	489-491
 a. Profit Margin: The amount by which revenue from a sale exceeds cost in a business. 	
b. Marketing Costs: Promotion, distribution, and storage costs associated with goods or services.	489-491

Standards / Objectives / Indicators	Textbook Pages
Objective 3: Students will be able to explain the basics of the 4P's of marketing.	See the G-W text, Fashion Marketing & Merchandising
Indicator 1: Product: any goods, services, or ideas that we wish to sell.	See the G-W text, Fashion Marketing & Merchandising
Indicator 2: Place: distribution is getting the right product to the right place at the right time in the right amount and in the right condition.	See the G-W text, Fashion Marketing & Merchandising
Indicator 3: Price: determining a dollar amount at which we can sell the product.	See the G-W text, Fashion Marketing & Merchandising
Indicator 4: Promotion: making potential customers aware of a product in a positive way so they will want to buy it.	See the G-W text, Fashion Marketing & Merchandising
Objective 4: Understand the basics for using credit for business financing.	
Indicator 1: Interest rate: the proportion of a loan that is charged as interest to the borrower, typically expressed as an annual percentage of the loan outstanding.	
Indicator 2: Personal guarantee: individual agrees to be responsible for the financial obligations of a debtor or borrower to a lender, if the debtor or borrower fails to pay an amount owing under the loan agreement.	
Indicator 3: Loan term: monetary loan that is repaid in regular payments over a set period of time. Term loans usually last between one and ten years but may last as long as 30 years in some cases. A term loan usually involves an unfixed interest rate that will add additional balance to be repaid.	
Indicator 4: Ability to repay: an economic principle stating that the amount of tax an individual pays should be dependent on the level of burden the tax will create relative to the wealth of the individual.	
Standard 5. Students will develop professional and interpersonal skills needed for success in the fashion industry.	
Objective 1: Determine the difference between hard skills and soft skills.	444-445,
Indicator 1: Hard Skills: Hard skills are specific, teachable abilities that can be defined and measured.	60-73, 104-108, 262–291, 292–311, 444- 445,
Indicator 2: Soft Skills: Personal attributes that enable someone to interact effectively and harmoniously with other people.	444-445, 469-470
Objective 2: Identify soft skills needed in the workplace.	61-75, 442-445, 448, 456-457, 464-479, 481-485, 487-489, 491, 492

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Standards / Objectives / Indicators	Textbook Pages
Indicator 1: Professionalism	464-466, 469-470, 476,
Indicator 2: Respect Legal requirements/expectations	84-85, 88-89
Indicator 3: Good communication skills	469-472, 473-474
Indicator 4: Resourcefulness & creativity	17, 63-64, 285, 484, 490,
Indicator 5: Work Ethic	473, 476