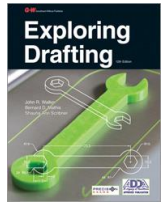


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Correlation Exploring Drafting ©2018
to Alabama Department of Education
Course Name: Introduction to Drafting Design (Grades 9-14)
Manufacturing: Additive Manufacturing



Standards		Correlating Text Pages
FOUNDATION STANDARDS		
Each foundational standard completes the stem "Students will..."		
1.	Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces.	61, 76-77
2.	Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork.	21-24, 441
3.	Explore the range of careers available in the field and investigate their educational requirements, and demonstrate job-seeking skills including resume-writing and interviewing.	13-24
4.	Advocate and practice safe, legal, responsible, and ethical use of information and technology tools specific to the industry pathway.	13-24, 61, 76-77
5.	Participate in a Career and Technical Student Organization (CTSO) to increase knowledge and skills and to enhance leadership and teamwork.	215
INTRODUCTION TO DRAFTING DESIGN CONTENT STANDARDS		
Each content standard completes the stem "Students will..."		
Orientation		
1.	Explain the importance of drafting design technology in today's technological workplace.	1-8
Safety		
2.	Demonstrate the safe handling of drafting design tools according to classroom and environmental best practices, procedures, and regulations.	61, 76-77
Applied Mathematics for Drafting		
3.	Demonstrate mathematical skills related to drafting design, including fractions, scale reading, and conversions of customary to metric and metric to customary measurements.	
	a. Utilize mathematics to solve drafting problems. <i>Example: calculating thread depth and pitch</i>	14, 16



Standards		Correlating Text Pages
Drafting Instruments and Techniques		
4.	Demonstrate the use of drawing media and drafting instruments, utilizing computer software for drafting applications	
	a. Reproduce drafting originals. <i>Examples: printing, plotting/blueprinting, scanning</i>	145, 413-414, 446-447, 521
Lettering and Drawing Techniques		
5	Demonstrate drafting techniques for freehand sketching, lettering, geometric figures, and the alphabet of lines.	30-47, 198-205
Multiview Drawing		
6	Construct basic multiview, two-dimensional drawings, including visualizing principal views, creating third-angle projections, selecting proper drawing scale, and organizing layout of primary views.	216-234
Basic Dimensioning		
7.	Apply dimensions and notes to multiview drawings, utilizing the American National Standards Institute (ANSI) dimensioning standards and decimal, metric, or dual dimensioning.	248-274
Fundamentals of Computer-Aided Drafting		
8.	Utilize CAD software to generate multiview drawings using appropriate file management techniques, basic drawing commands, and basic dimensioning techniques. <i>Examples: create, set up, and save files; line, ellipse, circle, and scale; linear and angular</i>	144-178