



Goodheart-Willcox Publisher Correlation of <i>Graphic Communications</i> ©2019 to South Carolina Department of Education CTE / Arts, AV Technology and Communications Standards Course: Graphic Communications II, III, IV (6201, 6202, 6203)	
STANDARDS	CORRELATING PAGES
STRAND 1: SAFETY AND HEALTH KNOWLEDGE AND SKILLS	
<u>Fundamentals of Health and Safety</u> Describe and apply health and safety regulations / Demonstrate appropriate health and safety practices based on the specific occupational area / Demonstrate appropriate responses to situations that may threaten health and safety	
1.A.01.01 Identify, describe and apply health and safety regulations that apply to specific tasks and jobs. 1.A.01.02 Identify, describe and apply Environmental Protection Agency (EPA) and other environmental protection regulations that apply to specific tasks and jobs in the specific occupational area. 1.A.01.03 Identify, describe and apply Right-To-Know (Hazard Communication Policy) and other communicative regulations that apply to specific tasks and jobs in the specific occupational area. 1.A.01.04 Explain procedures for documenting and reporting hazards to appropriate authorities. 1.A.01.05 Identify and describe potential consequences for non-compliance with appropriate health and safety regulations. 1.A.01.06 Identify and list contact information for appropriate health and safety agencies and resources. ----- 1.A.02.01 Identify, describe and demonstrate the effective use of Safety Data Sheets (SDS). 1.A.02.02 Read and interpret chemical, product and equipment labels to determine appropriate health and safety considerations. 1.A.02.03 Identify, describe and demonstrate personal, shop and job site safety practices and procedures. 1.A.02.04 Demonstrate safe dress and use of relevant safety gear, personal protective equipment (PPE) and ergonomics, e.g., wrist rests, adjustable workspaces, equipment, gloves, proper footwear, earplugs, eye protection and breathing apparatus. 1.A.02.05 Demonstrate appropriate safe body mechanics (including appropriate lifting techniques and ergonomics) 1.A.02.06 Locate emergency equipment, first aid kit, SDS information directories and emergency action/response plan/escape routes in your lab, shop and classroom, including labels and signage that follow OSHA Hazard Communication Program (HAZCOM),	1.A.01.01: 63–72, 74–79 1.A.01.02: 79–83 1.A.01.03: 61, 73 1.A.01.04: 61–63 1.A.01.05: 63–67 1.A.01.06: ----- 1.A.02.01: 61–62, 73 1.A.02.02: 69–72 1.A.02.03: 63–66 1.A.02.04: 66–68, 71–72, 75–79 1.A.02.05: 68–69, 78–79 1.A.02.06: 70 (Figure 4-15), 75, 76 (Figure 4-23), 77 (Figure 4-24)



<p>eyewash stations, shower facilities, sinks, fire extinguishers, fire blankets, telephone, master power switches and emergency exits.</p> <p>1.A.02.07 Demonstrate the safe use, storage, and maintenance of every piece of equipment in the lab, shop and classroom, e.g., the OSHA Lockout/Tagout Program (LOTO).</p> <p>1.A.02.08 Describe safe practices and procedures when working with and around electricity (e.g., ground fault circuit interrupter and frayed wiring)</p> <p>1.A.02.09 Practice safe handling of recycle hazardous, flammable and combustible materials, according to EPA, OSHA and product specifications.</p> <p>1.A.02.10 Demonstrate appropriate workspace cleaning, sanitation, disinfection and sterilization procedures required in specific occupational areas, e.g., Workplace Housekeeping OSHA Regulations.</p> <p>-----</p> <p>1.A.03.01 Describe First Aid procedures for potential injuries and other health concerns in occupational areas.</p> <p>1.A.03.02 Describe the need for emergency preparedness and an emergency action/response plan.</p> <p>1.A.03.03 Describe procedures used to handle emergency situations, defensive measures and accidents, including identification, reporting, response, evacuation plans and follow-up procedures.</p> <p>1.A.03.04 Demonstrate safety practices in specific occupational areas used to avoid accidents.</p> <p>1.A.03.05 Describe fire protection measures and precautions and response procedures.</p> <p>1.A.03.06 Demonstrate positive and appropriate behavior that contributes to a safe and healthy environment in school and the workplace.</p>	<p>1.A.02.07: 66</p> <p>1.A.02.08: 75 (Figure 4-22)</p> <p>1.A.02.09: 74–75</p> <p>1.A.02.10: 61</p> <p>-----</p> <p>1.A.03.01:</p> <p>1.A.03.02: 75</p> <p>1.A.03.03:</p> <p>1.A.03.04: 63–72, 74–79</p> <p>1.A.03.05: 74–75</p> <p>1.A.03.06: 51, 400</p>
<p>STRAND 2: TECHNICAL KNOWLEDGE AND SKILLS</p>	
<p>Graphics Communications Safety Knowledge and Skills</p> <p>Demonstrate an understanding of safety practices related to Graphic Communications</p>	
<p>2.A.01.01 Utilize a systematic safety program which meets OSHA requirements and promotes a safe working environment.</p> <p>2.A.01.02 Demonstrate safety procedures when using all equipment.</p> <p>2.A.01.03 Perform preventive maintenance and follow lubrication procedures for all equipment.</p> <p>2.A.01.04 Perform checks to verify that all machine guards are in place and operating properly before using equipment.</p> <p>2.A.01.05 Identify pinch points on all equipment, to include those that are guarded.</p>	<p>2.A.01.01:</p> <p>2.A.01.02: 63–83</p> <p>2.A.01.03: 83</p> <p>2.A.01.04: 63–66</p> <p>2.A.01.05: 63–66</p>



2.A.01.06 Utilize Lockout/Tagout system when performing press maintenance.	2.A.01.06: 66
Digital File Preparation Apply knowledge of digital prepress systems	
2.B.01.01 Identify specific computer platforms and associated operating systems. 2.B.01.02 Identify and follow procedures for backing up and archiving files. 2.B.01.03 Describe major imaging operations and workflow through the design and layout process (e.g., CTP computer to plate, computer to film). 2.B.01.04 Identify software applications used in print and digital multimedia outputs. 2.B.01.05 Utilize current industry standard software that is appropriate for the given job.	2.B.01.01: 172–174 2.B.01.02: 174 2.B.01.03: 315 2.B.01.04: 184–195 2.B.01.05: 184–195
Graphic Design Practices Demonstrate an understanding of the principle rules of typography / Demonstrate an understanding of the principal elements of design / Manipulate and scan images and materials / Demonstrate effective page layout practices as it applies to the production process	
2.C.01.01 Describe the use of body copy and display type. 2.C.01.02 Identify type selection through the use of font classification, styles and families. 2.C.01.03 Identify the differences between font formats (e.g., postscript, true type, opens type). 2.C.01.04 Explain the proper procedures for loading and utilizing font management systems. 2.C.01.05 Demonstrate keyboard skills, including short cuts and function keys. 2.C.01.06 Utilize the pica and point system (to include the conversions from point to pica to inch). 2.C.01.07 Follow best practices as they apply to fonts (kerning, tracking, leading, and alignments). 2.C.01.08 Follow best practices for type readability and legibility.	2.C.01.01: 151–152 2.C.01.02: 110–116 2.C.01.03: 193–195 2.C.01.04: 193–194 2.C.01.05: 2.C.01.06: 116 (Academic Link Feature), 117 2.C.01.07: 118–120 2.C.01.08: 120–123
----- 2.C.02.01 Define principles of design (balance, contrast, unity, rhythm, and proportion). 2.C.02.02 Define elements of design (line, shapes, mass, texture, color, etc.). 2.C.02.03 Demonstrate a working understanding of basic color theory as they apply to the imaging process. 2.C.02.04 Describe the fundamentals the effect of light conditions and paper characteristics on color perception. 2.C.02.05 Describe raster and vector images and their uses. 2.C.02.06 Create and manipulate a vector image using industry standard illustration software. -----	----- 2.C.02.01: 145–150 2.C.02.02: 134–145 2.C.02.03: 236–245 2.C.02.04: 195–197, 234–236, 347–348 2.C.02.05: 184–185 2.C.02.06: 184–185, 226–229 -----



<p>2.C.03.01 Scan materials into appropriate file formats and resolutions.</p> <p>2.C.03.02 Describe and apply basic digital photographic principles as used in printing.</p> <p>2.C.03.03 Perform color and tonal balance corrections on an image for reproduction purposes with consideration to end use.</p> <p>2.C.03.04 Utilizing industry standard software, retouch, modify, and correct images using various image-editing techniques.</p> <p>2.C.03.05 Manipulate raster image using photo-editing software.</p>	<p>2.C.03.01: 221–225</p> <p>2.C.03.02: 195–198</p> <p>2.C.03.03: 258–259, 270–271</p> <p>2.C.03.04: 226–229</p> <p>2.C.03.05: 184–185</p>
<p>2.C.04.01 Develop a documents utilizing an industry standard page layout program.</p> <p>2.C.04.02 Determine appropriate size, resolution, and format, and place graphic into a document.</p> <p>2.C.04.03 Develop multiple page documents using master pages and style sheets.</p> <p>2.C.04.04 Demonstrate industry standard practices in importing copy from a word processing program into a page layout program.</p> <p>2.C.04.05 Demonstrate knowledge of saving procedures for a given job utilizing industry standard formats. (native, PDF, EPS).</p> <p>2.C.04.06 Utilize best practices for file organization, selection and labeling of artwork for identification of links.</p> <p>2.C.04.07 Perform pre-press in preparation for separations and output.</p> <p>2.C.04.08 Convert or repurpose print files for multiple media (web, mobile media, and presentation).</p> <p>2.C.04.09 Manage the flow of information from a wide variety of sources for variable data output.</p> <p>2.C.04.10 Identify basic proofreading marks.</p> <p>2.C.04.11 Demonstrate knowledge of proofreading marks to edit a document.</p> <p>2.C.04.12 Complete changes to a digital copy utilizing a marked-up document using proofreader marks.</p> <p>2.C.04.13 Describe the impact of prepress (imaging) and finishing processes on press operations.</p> <p>2.C.04.14 Describe gripper margin requirements as they relate to intended output device.</p>	<p>2.C.04.01: 180–182</p> <p>2.C.04.02: 197–202</p> <p>2.C.04.03: 190–191</p> <p>2.C.04.04: 180–182</p> <p>2.C.04.05: 180, 198–200</p> <p>2.C.04.06: 200</p> <p>2.C.04.07:</p> <p>2.C.04.08:</p> <p>2.C.04.09:</p> <p>2.C.04.10: 202–204</p> <p>2.C.04.11: 202–204</p> <p>2.C.04.12:</p> <p>2.C.04.13:</p> <p>2.C.04.14:</p>
<p>Preparation and Assembly Practices for Output to Various Media Demonstrate appropriate file management practices / Demonstrate effective pre-flight practices / Demonstrate effective output practices</p>	
<p>2.D.01.01 Demonstrate the use of folders and hierarchical organizational structures in file management.</p>	<p>2.D.01.01: 200</p>



<p>2.D.01.02 Identify and correct common file errors (for input and output).</p> <p>2.D.01.03 Describe the uses of PDF documents and their settings.</p> <p>2.D.01.04 Identify and describe file types and their uses (jpeg, tiff, eps, ps).</p> <p>2.D.01.05 Identify file sizes and describe how they relate to output.</p>	<p>2.D.01.02: 175–180</p> <p>2.D.01.03: 199–200</p> <p>2.D.01.04: 198–200</p> <p>2.D.01.05: 198–202</p>
<p>2.D.02.01 Perform pre-flight operations and save to storage media.</p> <p>2.D.02.02 Collect and package digital files for output and portability.</p> <p>2.D.02.03 Soft proof a job.</p> <p>2.D.02.04 Impose a job for the proper layout.</p>	<p>2.D.02.01: 204–206, 208 (Career Link Feature)</p> <p>2.D.02.02: 207–209</p> <p>2.D.02.03: 207 (Think Green Feature), 208</p> <p>2.D.02.04:</p>
<p>2.D.03.01 Perform industry standard preflight practices on a document for file output.</p> <p>2.D.03.02 Utilize output devices to produce print to pre-defined client specifications.</p> <p>2.D.03.03 Identify and correct common output errors.</p> <p>2.D.03.04 Expose, process, and store film and/or plates.</p> <p>2.D.03.05 List considerations and identify the correct plate materials (paper, polyester, metal) for a given job.</p> <p>2.D.03.06 Demonstrate maintenance routines and techniques used to maintain and prolong film processor and/or plate-making equipment life.</p> <p>2.D.03.07 Describe and demonstrate the use of input and output devices (e.g., digital camera, laser printer).</p> <p>2.D.03.08 Describe the importance of image control marks to identify centers, bleeds, trims, register marks, side guides, and signature collation.</p> <p>2.D.03.09 Describe and demonstrate industry standard practices for trapping, knockouts, and overprints.</p>	<p>2.D.03.01:</p> <p>2.D.03.02:</p> <p>2.D.03.03:</p> <p>2.D.03.04:</p> <p>2.D.03.05: 306–309, 314–315</p> <p>2.D.03.06:</p> <p>2.D.03.07: 175–180</p> <p>2.D.03.08: 14, 390–391</p> <p>2.D.03.09: 271–275</p>
<p><u>Flexographic Printing Practices</u></p> <p>Demonstrate an understanding of basic flexographic principles / Demonstrate an understanding of flexographic platemaking practices / Demonstrate an understanding of pre-press practices specific to flexography / Demonstrate an understanding of press make-ready for flexography / Demonstrate an understanding of the plate mounting process / Demonstrate an understanding for press operations</p>	
<p>2.E.01.01 Define flexography</p> <p>2.E.01.02 Identify and list the flexography print markets and segments</p> <p>2.E.01.03 Identify and define key terms: anilox roll, doctor blade, flexography, matrix, photopolymer plates, plate elongation, repeat length viscosity and Zahn cup</p> <p>2.E.01.04 Identify safety considerations for plate making and press operations</p> <p>2.E.01.05 Read and interpret production information on job docket/ticket</p> <p>2.E.01.06 Identify press configurations</p>	<p>2.E.01.01: 12, 314</p> <p>2.E.01.02:</p> <p>2.E.01.03: 12, 314–315, 317, 360</p> <p>2.E.01.04: 321, 323, 327</p> <p>2.E.01.05: 404–405</p> <p>2.E.01.06: 319</p>



<p>2.E.01.07 Identify main components of each station 2.E.01.08 Identify and determine repeat length 2.E.01.09 Define pitch 2.E.01.10 Identify strengths and weaknesses of flexography 2.E.01.11 Identify key characteristics and terms related to anilox rolls: engraved cells, screen angles used, line screens/ruling, anilox materials</p>	<p>2.E.01.07: 2.E.01.08: 2.E.01.09: 2.E.01.10: 313–316, 318–321 2.E.01.11:</p>
<p>2.E.02.01 Identify plate materials used in industry and the classroom (photopolymer, molded rubber and laser engraved) 2.E.02.02 Describe the plate-making process and what occurs at each step 2.E.02.03 Identify the parts of a plate to include: floor, shoulder, surface, calculate relief using a micrometer 2.E.02.04 Identify procedure for an exposure test 2.E.02.05 Performing a plate exposure test to determine proper plate exposure times 2.E.02.06 Properly make a flexo plate: choose the correct negative, determine face/back, back exposure, remove protective sheet, clean and examine negative, face exposure, washout, post-expose and de-tack, dry 2.E.02.07 Evaluate flexo plates for quality and identify imperfections</p>	<p>2.E.02.01: 314–315 2.E.02.02: 10–12, 306–308 2.E.02.03: 2.E.02.04: 2.E.02.05: 2.E.02.06: 2.E.02.07:</p>
<p>2.E.03.01 Identify software to be used to build artwork and dielines 2.E.03.02 Identify limitations for artwork 2.E.03.03 Create a dieline given a press sample of the diecut 2.E.03.04 Identify and trap artwork where necessary 2.E.03.05 Identify and add proper running targets to artwork 2.E.03.06 Perform file distortion to prepare file for output 2.E.03.07 Perform file output following the given specifications: Negative, Emulsion Up Right Reading, Separations</p>	<p>2.E.03.01: 2.E.03.02: 2.E.03.03: 383 2.E.03.04: 271–275 2.E.03.05: 2.E.03.06: 200–202 2.E.03.07: 10, 327–329</p>
<p>2.E.04.01 Identify materials needed to assemble each given station 2.E.04.02 Identify and demonstrate knowledge of proper sequence and materials to assemble a station for a one color run 2.E.04.03 Identify and demonstrate knowledge of proper sequence and materials to assemble two stations for a two color run 2.E.04.04 Perform proper installation of a doctor blade (where applicable)</p>	<p>2.E.04.01: 2.E.04.02: 2.E.04.03: 2.E.04.04:</p>



2.E.04.05 Test inks (pH, viscosity) and record data	2.E.04.05: 357–360
2.E.04.06 Perform ink metering using a two roll metering system	2.E.04.06:
2.E.04.07 Perform ink metering using a doctor blade (where applicable)	2.E.04.07: 360

2.E.05.01 Identify the three plate systems, disadvantages and advantages to each: integral, demountable and sleeve	2.E.05.01:
2.E.05.02 Identify the correct cylinder for the given repeat	2.E.05.02:
2.E.05.01 Identify the correct sticky back for the press run	2.E.05.03:
2.E.05.03 Perform application sticky back to the correct plate cylinder for a given job	2.E.05.04:
2.E.05.04 Perform plate mounting onto the correct plate cylinder for a given job	2.E.05.05:
2.E.05.05 Describe why we mount our plates in a specific location	-----

2.E.06.01 Identify safety consideration for press operations	2.E.06.01: Warning Features–321, 323, 357, 361, 377, 379, 386, 391
2.E.06.02 Demonstrate safe work habits in press operations	2.E.06.02: 63–83
2.E.06.03 Identify and splice the correct stock for press run	2.E.06.03:
2.E.06.04 Identify basic parts of the press	2.E.06.04: 11 (Academic Link Feature)
2.E.06.05 Identify volume of anilox roll	2.E.06.05:
2.E.06.06 Perform safe installation of an anilox roll (as applicable)	2.E.06.06:
2.E.06.07 Demonstrate how to determine stock type (paper v poly)	2.E.06.07: 432 (Figure Appendix B-19)
2.E.06.08 Perform checks of each station for proper assembly	2.E.06.08:
2.E.06.09 Perform checks of unwind and rewind for bladder inflation	2.E.06.09:
2.E.06.10 Perform installation of a plate cylinder and check for gears to interlock	2.E.06.10: 312–313
2.E.06.11 Identify and explain uses of the jog, start, stop and e-stop	2.E.06.11:
2.E.06.12 Identify and explain uses of web side-guides	2.E.06.12: 312–313
2.E.06.13 Perform setting of impression of plate to substrate	2.E.06.13:
2.E.06.14 Utilize standard settings for dryer making sure to check that unused areas are off.	2.E.06.14: 360
2.E.06.15 Identify ink types	2.E.06.15: 360–364
2.E.06.16 Describe the purpose of a doctor blade	2.E.06.16: 12, 317 (Figures 14-39 and 14-40), 360
2.E.06.17 Perform standard press operations to register and diecut a one color job	2.E.06.17:



<p>2.E.06.18 Perform standard press operations to register and diecut a two color job</p> <p>2.E.06.19 Perform standard press operations to diecut a three color job (when applicable)</p> <p>2.E.06.20 Perform standard press operations to diecut a four color job (when applicable)</p> <p>2.E.06.21 Utilizing safe practices, strip waste matrix</p> <p>2.E.06.22 Identify anilox roll capacity (what is billion cubic microns?) and how it affects volume of ink</p> <p>2.E.06.23 Utilizing best and safe practices, clean up ink stations used</p> <p>2.E.06.24 Identify and utilize best practices as they relate to material usage and storage</p> <p>2.E.06.24 Identify proper webbing of a press</p> <p>2.E.06.25 Observe the press operation of a commercial printer</p> <p>-----</p> <p>2.E.06.01 Identify safety consideration for press operations</p> <p>2.E.06.02 Estimate ink usage and calculate cost</p> <p>2.E.06.03 Practice the use of flags to count sheets</p> <p>2.E.06.04 Perform maintenance where necessary</p>	<p>2.E.06.18:</p> <p>2.E.06.19:</p> <p>2.E.06.20:</p> <p>2.E.06.21:</p> <p>2.E.06.22:</p> <p>2.E.06.23: Warning Features–357, 361</p> <p>2.E.06.24: 67, 73, 366</p> <p>2.E.06.24: 302–306</p> <p>2.E.06.25:283 (Suggested Activity), 299 (Suggested Activity), 397 (Suggested Activity)</p> <p>-----</p> <p>2.E.06.01: 321, 323, 327, 357, 361, 377, 379, 386, 391</p> <p>2.E.06.02: 366</p> <p>2.E.06.03:</p> <p>2.E.06.04: 83</p>
<p>Offset Print Production Practices</p> <p>Demonstrate an understanding of feeder and registration systems / Demonstrate an understanding of inking and dampening systems / Demonstrate an understanding of cylinder systems / Demonstrate an understanding of delivery systems / Demonstrate effective use of make-ready on an offset press / Demonstrate an understanding of printing operations on an offset press</p>	
<p>2.F.01.01 Describe the various types of feeder systems and their components.</p> <p>2.F.01.02 Explain paper classifications and characteristics of various printing substrates.</p> <p>2.F.01.03 Describe procedures for jogging and loading paper stock into the feeder.</p> <p>2.F.01.04 Describe the various types of registration systems and their components.</p> <p>2.F.01.05 Describe techniques used to maintain register.</p> <p>2.F.01.06 Perform the set up the feeder and registration systems accurately.</p> <p>-----</p> <p>2.F.02.01 Describe the components of the inking system.</p> <p>2.F.02.02 Explain the characteristics of different inks.</p> <p>2.F.02.03 Describe procedures for preparing and maintaining the inking system.</p> <p>2.F.02.04 Explain the characteristics of various chemicals used in the printing process.</p> <p>2.F.02.05 Describe the components of the dampening system.</p>	<p>2.F.01.01: 302–306</p> <p>2.F.01.02: 338–348</p> <p>2.F.01.03: 312–313</p> <p>2.F.01.04:</p> <p>2.F.01.05:</p> <p>2.F.01.06: 303–304</p> <p>-----</p> <p>2.F.02.01: 311–312</p> <p>2.F.02.02: 357–364</p> <p>2.F.02.03: 311–312</p> <p>2.F.02.04: 69–72, 323, 357–359</p> <p>2.F.02.05: 309–311</p>



<p>2.F.02.06 Describe the function of fountain solution. 2.F.02.07 Describe procedures for preparing and maintaining the dampening system. 2.F.02.08 Set up the inking and dampening systems accurately.</p>	<p>2.F.02.06: 311 2.F.02.07: 309–311 2.F.02.08: 309–312</p>
<p>2.F.03.01 Describe the components of the various types of cylinder systems. 2.F.03.02 Determine methods of packing plates and blankets following the manufacturer’s specifications. 2.F.03.03 Identify basic cylinder configurations. 2.F.03.04 Describe and compare plate characteristics and materials. 2.F.03.05 Identify the causes of and list solutions for image transfer problems. 2.F.03.06 Describe methods of mounting plates. 2.F.03.07 Perform the set up the cylinder system accurately.</p>	<p>2.F.03.01: 315–316 2.F.03.02: 2.F.03.03: 306–309 2.F.03.04: 314–315 2.F.03.05: 356, 366–368 2.F.03.06: 2.F.03.07:</p>
<p>2.F.04.01 Describe the components of the various types of delivery systems. 2.F.04.02 Perform the set up the delivery system accurately. 2.F.04.03 Identify various drying systems (IR, spray, thermography).</p>	<p>2.F.04.01: 312–313 2.F.04.02: 312–313 2.F.04.03: 293–294, 363–364, 366</p>
<p>2.F.05.01 Perform the setup of the feeder and registration systems. 2.F.05.02 Perform the basic preparations for ink and inking system. 2.F.05.03 Perform the basic preparations for the dampening system. 2.F.05.04 Perform the basic preparations for the cylinder system (mount plates, set impression). 2.F.05.05 Perform the setup of the delivery and drying systems.</p>	<p>2.F.05.01: 303–306 2.F.05.02: 311–312, 365 2.F.05.03: 309–311 2.F.05.04: 2.F.05.05:</p>
<p>2.F.06.01 Demonstrate the use of common printing hand tools and measuring instruments. 2.F.06.02 Identify common printing problems and their resolutions. 2.F.06.03 Perform printing operations. 2.F.06.04 Demonstrate the use of quality control standards and techniques: image and color quality, fit and registration, ink and water balance. 2.F.06.05 Monitor feeder, registration inking, dampening, cylinder, delivery, and drying systems. 2.F.06.06 Demonstrate effective maintenance schedules by adhering to manufacturer’s press maintenance schedule.</p>	<p>2.F.06.01: 2.F.06.02 2.F.06.03: 302–329 2.F.06.04: 246–248, 369–370 2.F.06.05: 2.F.06.06:</p>



Screen Printing Practices	
Demonstrate procedures used for screen printing	
2.G.02.01 Compare the difference between manual process and automatic process.	2.G.02.01: 329
2.G.02.02 Compare the difference between mesh counts.	2.G.02.02: 324
2.G.02.03 Prepare positives for production.	2.G.02.03:
2.G.02.04 Follow best practices in the application of emulsion (or capillary film) to a screen.	2.G.02.04: 327–329
2.G.02.05 Demonstrate exposure of a screen using an exposure unit and exposure calculator.	2.G.02.05:
2.G.02.06 Prepare a screen for production (masking and taping).	2.G.02.06:
2.G.02.07 Describe ink curing process for a variety of inks.	2.G.02.07: 358–359
2.G.02.08 Perform analysis and setting of alignment of print heads and off contact.	2.G.02.08:
2.G.02.09 Perform registration of multiple screens for multicolor print.	2.G.02.09:
2.G.02.10 Demonstrate printing technique of an image using a squeegee.	2.G.02.10: 322–323
2.G.02.11 Explain the need for incorporating a flash unit.	2.G.02.11:
2.G.02.12 Demonstrate the use of a flash unit.	2.G.02.12:
2.G.02.13 Demonstrate curing/drying techniques, using infrared thermometer.	2.G.02.13: 356
2.G.02.14 Demonstrate reclaiming and degreasing of screens.	2.G.02.14: 327
Additional Printing Processes used in Graphic Communications	
Demonstrate effective digital printing practices according to current industry standards / Demonstrate plotting and sign making practices / Demonstrate an understanding of wide format printing practices / Demonstrate an understanding of dye-sublimation printing practices	
2.H.01.01 Configure electronic files for digital output.	2.H.01.01: 197–202, 204–207
2.H.01.02 Manage RIP workstation / job queue.	2.H.01.02: 179
2.H.01.03 Demonstrate knowledge of scanning in the input of appropriate specifications for document scanning.	2.H.01.03: 97–98
2.H.01.04 Scan a document using a document handler or flatbed on digital printer.	2.H.01.04: 292–293
2.H.01.05 Load substrate into the appropriate feeder.	2.H.01.05: 312–313, 343
2.H.01.06 Adjust digital printer for the type of stock.	2.H.01.06:
2.H.01.07 Perform color correction or black and white adjustments for best results.	2.H.01.07: 318, 369–370
2.H.01.08 Configure settings for finishing unit on digital printer.	2.H.01.08:
2.H.01.09 Demonstrate removal and installation of toner/ink to printer.	2.H.01.09:
2.H.01.10 Change waste container.	2.H.01.10:
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<p>2.H.03.01 Prepare plotting for different substrates. 2.H.03.02 Prepare and execute file for plotting. 2.H.03.03 Demonstrate proper weeding technique. 2.H.03.04 Prepare material for use in sign making and plotting.</p>	<p>2.H.03.01: 2.H.03.02: 2.H.03.03: 2.H.03.04:</p>
<p>2.H.04.01 Explain resolution requirements and guidelines for wide-format output. 2.H.04.02 Perform preventive maintenance routines to ensure quality product. 2.H.04.03 Navigate paper selection menu to match paper to intended output. 2.H.04.04 Prepare document to be printed on various substrates. 2.H.04.05 Mount document on backing. 2.H.04.06 Laminate, trim and finish large format print (including grommets).</p>	<p>2.H.04.01: 2.H.04.02: 83 2.H.04.03: 2.H.04.04: 2.H.04.05: 2.H.04.06:</p>
<p>2.H.05.01 Describe resolution requirements and guidelines for dye-sub output. 2.H.05.02 Describe transfer material requirements for intended substrate. 2.H.05.03 Perform preventive maintenance routines to ensure quality product. 2.H.05.04 Prepare document to be printed on various substrates. 2.H.05.05 Navigate substrate selection menu to match paper requirements for intended destination. 2.H.05.06 Align transfer paper to substrate and secure against movement during transfer. 2.H.05.07 Demonstrate handling procedures appropriate to substrate being used.</p>	<p>2.H.05.01: 2.H.05.02: 2.H.05.03: 83 2.H.05.04: 2.H.05.05: 2.H.05.06: 2.H.05.07:</p>
<p>Finishing Practices Demonstrate an understanding of the principles of binding and finishing</p>	
<p>2.I.01.01 Identify common imaging and press problems that could adversely affect binding, finishing and distribution quality. 2.I.01.02 Identify the importance of input quality on binding and finishing. 2.I.01.03 Explain the importance of image control marks to identify centers, bleeds, trims, register marks, side guides, and signature collation. 2.I.01.04 Explain how paper characteristics affect binding and folding operations. 2.I.01.05 Describe workflow operations undertaken within finishing and distribution operations. 2.I.01.06 Establish the sequence of production operations within the finishing and distribution area.</p>	<p>2.I.01.01: 2.I.01.02: 2.I.01.03: 2.I.01.04: 304, 313, 387–391 2.I.01.05: 394–395 2.I.01.06: 376–395</p>



<p>2.I.01.07 Minimize paper waste and spoilage prior to printing, and manage waste disposal in finishing and distribution operations.</p> <p>2.I.01.08 Cut materials to given specifications, utilizing stock cutting math formula.</p> <p>2.I.01.09 Demonstrate proper folding steps and processes.</p> <p>2.I.01.10 Perform saddle-stitching and side-stitching finishing techniques.</p> <p>2.I.01.11 Perform mechanical binding techniques.</p> <p>2.I.01.12 Perform set up and use a perforation or score.</p> <p>2.I.01.13 Collate signatures.</p> <p>2.I.01.14 Demonstrate adhesive or perfect binding techniques.</p> <p>2.I.01.15 Trim printed materials.</p> <p>2.I.01.16 Drill holes with drill press.</p> <p>2.I.01.17 Perform numbering process.</p> <p>2.I.01.18 Set up and laminate a job with either heat set laminate or cold set laminate.</p> <p>2.I.01.19 List procedures for storing raw materials and finished products.</p>	<p>2.I.01.07:</p> <p>2.I.01.08: 376–379, 422</p> <p>2.I.01.09: 379–381</p> <p>2.I.01.10: 387 (Figure 17-28), 388, 391</p> <p>2.I.01.11: 387–394</p> <p>2.I.01.12: 382–383</p> <p>2.I.01.13: 388–391</p> <p>2.I.01.14: 387–388, 392–393</p> <p>2.I.01.15: 376–379</p> <p>2.I.01.16: 385</p> <p>2.I.01.17: 385</p> <p>2.I.01.18: 386–387</p> <p>2.I.01.19:</p>
STRAND 3: EMPLOYABILITY AND CAREER READINESS	
Career Exploration and Navigation Develop a career plan and portfolio / Demonstrate job search skills / Demonstrate all phases of the job interview process	
<p>3.A.01.01 Develop and revise career plan annually based on workplace awareness and skill attainment.</p> <p>3.A.01.02 Assess personal strengths and interest areas to determine potential careers, career pathways and career ladders.</p> <p>3.A.01.03 Examine potential career field(s)/discipline(s) and identify criteria to select, secure and keep employment in chosen field(s).</p> <p>3.A.01.04 Research and evaluate a variety of careers utilizing multiple sources of information and resources to determine potential career(s) and alternatives.</p> <p>3.A.01.05 Identify training and education requirements that lead to employment in chosen field(s) and demonstrate skills related to evaluating employment opportunities.</p> <p>3.A.01.06 Explore and evaluate postsecondary educational opportunities including degrees and certifications available, traditional and nontraditional postsecondary pathways, technical school and apprenticeships, cost of education, financing methods including scholarships and loans and the cost of loan repayment.</p> <p>3.A.01.07 Create a portfolio showcasing academic and career growth including a career plan, safety credential, resume and a competency profile demonstrating the</p>	<p>3.A.01.01:</p> <p>3.A.01.02:</p> <p>3.A.01.03: 26–41, Career Link Features–64, 153, 208, 220, 248, 294, 320, 390, 407</p> <p>3.A.01.04:</p> <p>3.A.01.05: 46–47, 435–437</p> <p>3.A.01.06: 36–37, 46–47</p> <p>3.A.01.07: 46–47</p>



<p>acquisition of the knowledge and skills associated with at least two years of full-time study in the Chapter 74 program.</p> <hr/> <p>3.A.02.01 Conduct a job search and complete written and electronic job applications, resumes, cover letters and related correspondence for a chosen career path.</p> <p>3.A.02.02 Explore and evaluate postsecondary job opportunities and career pathways specific to career technical areas.</p> <p>3.A.02.03 Identify role and use of social media and networking for staying current with career and employment trends as well as networking, job seeking and career development opportunities.</p> <p>3.A.02.04 Demonstrate ability to use social media and networking to develop useful occupational contacts, job seeking and career development opportunities.</p> <hr/> <p>3.A.03.01 Gather relevant information about potential employer(s).</p> <p>3.A.03.02 Identify employment eligibility criteria, such as drug/alcohol free status, clean driving record, etc.</p> <p>3.A.03.03 Practice effective interviewing skills: appearance, inquiry and dialogue with interviewer, positive attitude and evidence of work ethic and skills.</p>	<hr/> <p>3.A.02.01: 37–38, 43 (Suggested Activities)</p> <p>3.A.02.02: 26–36</p> <p>3.A.02.03: 51</p> <p>3.A.02.04: 51</p> <hr/> <p>3.A.03.01: 57 (Suggested Activities)</p> <p>3.A.03.02:</p> <p>3.A.03.03: 38, 43 (Suggested Activities)</p>
<p>Communication in the Workplace Demonstrate appropriate oral and written communication skills in the workplace / Demonstrate active listening skills</p>	
<p>3.B.01.01 Communicate effectively using the language and vocabulary appropriate to a variety of audiences within the workplace including coworkers, supervisors and customers.</p> <p>3.B.01.02 Read technical and work-related documents and demonstrate understanding.</p> <p>3.B.01.03 Demonstrate professional writing skills in work-related materials and communications (e.g., letters, memoranda, instructions and directions, reports, summaries, notes and/or outlines).</p> <p>3.B.01.04 Orally present technical and work-related information to a variety of audiences.</p> <p>3.B.01.05 Identify and demonstrate professional non-verbal communication.</p> <hr/> <p>3.B.02.01 Listen attentively and respectfully to others.</p> <p>3.B.02.02 Focus attentively, make eye contact or other affirming gestures, confirm understanding and follow directions.</p> <p>3.B.02.03 Show initiative in improving communication skills by asking follow-up questions of speaker in order to confirm understanding.</p>	<p>3.B.01.01: 163–164</p> <p>3.B.01.02:</p> <p>3.B.01.03:</p> <p>3.B.01.04: 164–165</p> <p>3.B.01.05: 166</p> <hr/> <p>3.B.02.01: 166</p> <p>3.B.02.02:</p> <p>3.B.02.03: 166</p>



Work Ethic and Professionalism	
Demonstrate attendance and punctuality / Demonstrate proper workplace appearance / Accepts direction and constructive criticism / Demonstrate motivation and initiative / Demonstrate awareness of workplace culture and policy / Interact appropriately with coworkers	
3.C.01.01 Identify and practice professional time-management and attendance behaviors including punctuality, reliability, planning and flexibility. -----	3.C.01.01: -----
3.C.02.01 Identify and practice professional appearance specific to the workplace. 3.C.02.02 Identify and practice personal hygiene appropriate for duties specific to the workplace. 3.C.02.03 Identify and wear required safety gear specific to the workplace. -----	3.C.02.01: 66–67 3.C.02.02: 3.C.02.03: 66–67 -----
3.C.03.01 Demonstrate ability (both verbally and non-verbally) to accept direction and constructive criticism and to implement solutions to change behaviors. 3.C.03.02 Ask appropriate questions to clarify understanding of feedback. 3.C.03.03 Analyze own learning style and seek instructions in a preferred format that works best for their understanding (such as oral, written or visual instruction). -----	3.C.03.01: 164–167 3.C.03.02: 3.C.03.03: -----
3.C.04.01 Evaluate assigned tasks for time to completion and prioritization. 3.C.04.02 Demonstrate motivation through enthusiasm, engagement, accurate completion of tasks and activities. 3.C.04.03 Demonstrate initiative by requesting new assignments and challenges. 3.C.04.04 Explain proposed solutions to challenges observed in the workplace. 3.C.04.05 Demonstrate the ability to evaluate multiple solutions to problems and challenges using critical reasoning and workplace/industry knowledge and select the best solution to the problem. 3.C.04.06 Implement solution(s) to challenges and/or problem(s) observed in the workplace. 3.C.04.07 See projects through completion and check work for quality and accuracy. -----	3.C.04.01: 3.C.04.02: 51 3.C.04.03: 3.C.04.04: 3.C.04.05: 3.C.04.06: 3.C.04.07: -----
3.C.05.01 Display ethical behavior in use of time, resources, computers and information. 3.C.05.02 Identify the mission of the organization and/or department. -----	3.C.05.01: 3.C.05.02: -----
3.C.06.01 Work productively with individuals and in teams.	3.C.06.01: 39, 51



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<p>3.C.06.02 Develop positive mentoring and collaborative relationships within work environment.</p> <p>3.C.06.03 Show respect and collegiality, both formally and informally.</p> <p>3.C.06.04 Explain and follow workplace policy on the use of cell phones and other forms of social media.</p> <p>3.C.06.05 Maintain focus on tasks and avoid negative topics or excessive personal conversations in the workplace.</p>	<p>3.C.06.02: 39, 51</p> <p>3.C.06.03:</p> <p>3.C.06.04:</p> <p>3.C.06.05:</p>
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