



# Digital Print Design

## EXAM INFORMATION

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**Items**

75

**Points**

79

**Prerequisites**GRAPHIC COMMUNICATIONS,  
INTERMEDIATE**Grade Level**

11-12

**Course Length**

ONE SEMESTER

**Career Cluster**ARTS, A/V TECHNOLOGY, AND  
COMMUNICATION**Performance Standards**

NONE

**Certificate Available**

YES

## DESCRIPTION

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Create and produce digital print projects that communicate and promote graphic communication. Develop knowledge and skills relative to the graphic design and printing industries. Includes: instruction and hands-on experiences in design and layout. Instruction includes the use of industry standard graphics software with the Adobe Creative Suite.

## EXAM BLUEPRINT

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**STANDARD****PERCENTAGE OF EXAM**

1- Digital Print Design	8%
2- Safe Practices	10%
3- Design Process	8%
4- Typography	14%
5- Digital Image Editing	14%
6- Digital Illustration	17%
7- Page Layout (InDesign)	5%
8- File Management	8%
9- Demonstrate Digital File Output	8%
10- Professional Skills for the Workplace	8%



## **STANDARD 1**

### STUDENTS WILL UNDERSTAND THE INTRODUCTION TO DIGITAL PRINT DESIGN

- Objective 1 Define graphic communications.
- Objective 2 Define design and its role in graphic communications.
- Objective 3 Identify the capabilities, advantages, and disadvantages of software programs used in digital print design.
- Objective 4 Select appropriate software for a given print job.
- Objective 5 Demonstrate an understanding of file formats (.ai, .jpg, .png, .psd, .gif, .tif, .indd, .pdf, etc.), file organization, and file naming conventions.
- Objective 6 Identify the differences between raster and vector images and file formats.
- Objective 7 Students will demonstrate proficiency in the use of measurement systems utilized in the graphic communications industry. (Points, picas, standard (inches), metric)

## **STANDARD 2**

### STUDENTS WILL UNDERSTAND AND DEMONSTRATE SAFE PRACTICES

- Objective 1 List safety rules involving flammable liquids.
- Objective 2 Read, comprehend, and follow instructions on warning labels
- Objective 3 List the steps to be taken in case of injury in the lab.
- Objective 4 Identify location(s) of first aid kit(s), eye wash station, MSDS, and safety equipment.
- Objective 5 Follow proper safety procedures and dress code when operating equipment.
- Objective 6 Demonstrate common sense when working with others.
- Objective 7 Pass general lab safety test.

## **STANDARD 3**

### STUDENTS WILL UNDERSTAND AND DEMONSTRATE THE DESIGN PROCESS

- Objective 1 Apply the design process. (Thumbnails, rough, comp, etc.)
- Objective 2 Identify the elements of design and demonstrate their proper use. (Lines, shapes, mass, texture, color)
- Objective 3 Identify the principles of design and demonstrate their proper use. (Unity, contrast, proportion, balance, rhythm)
- Objective 4 Identify layout elements and demonstrate their proper use. (Display type, body type, illustrations, and white space)
- Objective 5 Create a design for printing, applying the design process.

## **STANDARD 4**

### STUDENTS WILL UNDERSTAND AND DEMONSTRATE THE USE OF TYPOGRAPHY

- Objective 1 Describe the anatomy of type. (Baseline, ascenders, descenders, serifs, etc.)
- Objective 2 Identify typeface classifications and their uses. (Roman, san serif, square serif, black letter/text, script, novelty)



- Objective 3 Understand the measurement of type using points.
- Objective 4 Demonstrate the correct conversion of point to inches.
- Objective 5 Identify caps, lowercase, uppercase, small caps, dingbats, symbols, and ligatures.
- Objective 6 Identify the basic type styles and their uses. (Bold, italics, condensed)
- Objective 7 Explain letter spacing, tracking, leading, and kerning of type characteristics.
- Objective 8 Define type alignment: flus left, flush right, centered, justified, and force justified.
- Objective 9 Create a design using proper typography concepts.

## **STANDARD 5**

### STUDENTS WILL UNDERSTAND AND DEMONSTRATE DIGITAL IMAGE EDITING (PHOTOSHOP)

- Objective 1 Demonstrate a functional knowledge of keyboard shortcuts/menus/tools and procedures for their uses in an image editing program (e.g., Photoshop).
- Objective 2 Capture digital images using a scanner and/or a digital camera.
- Objective 3 Identify appropriate scanner/program operations for line artwork and continuous tone in both grayscale and color.
- Objective 4 Identify high/low resolution images and describe the uses of each.
- Objective 5 Edit a raster image. (I.E. color correction, levels, cropping, scaling, etc.)
- Objective 6 Scale a raster image using the proper settings in order to maintain the appropriate resolution for print or digital media.
- Objective 7 Solve mathematical equations as they relate to pixels.
- Objective 8 Download a digital image from a stock photography source.
- Objective 9 Demonstrate an understanding of additive (RGB) and subtractive (CMYK) color modes.
- Objective 10 Identify filters and their uses, and create a design using filters.
- Objective 11 Identify layers and their uses, and create a design using layers.
- Objective 12 Demonstrate the use of selection tools. (I.E. marquee, magic wand, lasso etc.)
- Objective 13 Demonstrate the use of type tool in Photoshop.
- Objective 14 Demonstrate how to perform photo repairs and retouching. (I.E. healing brush, clone stamp, content-aware, etc.)
- Objective 15 Perform non-destructive editing techniques.

## **STANDARD 6**

### STUDENTS WILL UNDERSTAND AND DEMONSTRATE DIGITAL ILLUSTRATION (ILLUSTRATOR)

- Objective 1 Demonstrate a functional knowledge of keyboard shortcuts/menus/tools and procedures for their use in a digital illustration program.
- Objective 2 Understand the advantages & disadvantages of vector images.
- Objective 3 Use the appropriate graphics program to create a design or logo using manipulated type (rotated, type on a path, expanded, effects, tints and fills, etc.).
- Objective 4 Create or trace a drawing/photograph with use of the pen tool.
- Objective 5 Edit a vector image, modifying anchor points and paths.
- Objective 6 Demonstrate the use of selection tools (i.e. selection, direct selection, magic wand, etc.)
- Objective 7 Solve ratio and percent equations.



- Objective 8 Create a design using basic shapes and use of transforming tools. (I.E. shape tool, pathfinder, transform, etc.)
- Objective 9 Create a design using layers.
- Objective 10 Create a spot color illustration or logo using Pantone Matching System® (PMS) or other color matching system, and view or print separations.

## **STANDARD 7**

### STUDENTS WILL UNDERSTAND AND DEMONSTRATE PAGE LAYOUT (INDESIGN)

- Objective 1 Demonstrate a functional knowledge of keyboard shortcuts/menus/tools and procedures for their use in a page layout program.
- Objective 2 Design and produce a document using spot color and process color.
- Objective 3 Output color separations.
- Objective 4 Set text with appropriate margins; formatting; gutters; and, proper leading.
- Objective 5 Create a computer-generated layout incorporating appropriate marks (i.e. gutters, register marks, trim marks, bleed marks, fold lines, etc.)
- Objective 6 Design and produce a document designating appropriate fonts, styles, indents, tabs, tables.
- Objective 7 Design and produce a document designating appropriate margins, guides, columns.
- Objective 8 Design and produce a document designating appropriate margins, guides, columns.
- Objective 9 Demonstrate the procedure for cropping and re-sizing frame for digital images.
- Objective 10 Create a printed piece using tints, reverse type, and manipulated type for effect.
- Objective 11 Demonstrate use of proofreading (i.e. digital dictionary, spell checker, automatic hyphenation, etc.)
- Objective 12 Create documents using grids; templates; master pages; paragraph style sheets; and, character style sheets.
- Objective 13 Create a 2-sided, 3-panel, brochure using graphics and text.
- Objective 14 Create an imposition for a multiple page document in InDesign.
- Objective 15 Preflight and package a native file.
- Objective 16 Export a print-ready Portable Document Format (PDF) and/or a raster image using page layout software.

## **STANDARD 8**

### STUDENTS WILL UNDERSTAND AND DEMONSTRATE FILE MANAGEMENT

- Objective 1 Identify various digital storage media, and file transfer methods.
- Objective 2 Understand standard file storage units and terminology. (KB, MB, GB, TB, etc.)
- Objective 3 Install and organize fonts, identify various font formats and their uses.
- Objective 4 Save images and documents into the appropriate file format.
- Objective 5 Demonstrate adherence to copyright and trademarks laws.
- Objective 6 Organize, delete, and rename files according to project requirements.



## STANDARD 9

### STUDENTS WILL UNDERSTAND AND DEMONSTRATE DIGITAL FILE OUTPUT

- Objective 1 Define output devices related to print production.
- Objective 2 Create an interactive PDF.
- Objective 3 Output a design from a graphic software program to be used in a printing process.
- Objective 4 Confirm printed product matches given specifications. (I.E. product dimensions, color, finishing process, etc.)
- Objective 5 Correctly send a file electronically to a specified location.
- Objective 6 Output a multi-page document and/or book using appropriate graphic software program.

## STANDARD 10

### STUDENTS WILL ENHANCE THEIR UNDERSTANDING OF GRAPHIC/PRINTING AS A PROFESSION AND WILL DEVELOP PROFESSIONAL SKILLS FOR THE WORKPLACE

- Objective 1 As a participating member of the SkillsUSA student organization, complete the SkillsUSA Level 2 Professional Development Program.
  1. Measure/modify short-term goals.
  2. Identify stress sources.
  3. Select characteristics of a positive image.
  4. Demonstrate Government awareness.
  5. Demonstrate awareness of professional organizations.
  6. Apply team skills to a group project.
  7. Observe and critique team skills at a local professional meeting.
  8. Demonstrate business meeting skills.
  9. Explore workplace ethics: codes of conduct.
  10. Demonstrate social etiquette.
  11. Complete survey for employment opportunities.
  12. Review a professional journal and develop a three- to five-minute speech.
  13. Complete a job application.
  14. Assemble an employment portfolio.
  15. Explore supervisory and management roles in an organization.
  16. Conduct a worker interview.
  17. Perform a self-evaluation of proficiency in program competencies.
- Objective 2 Serve in the school's SkillsUSA chapter as a committee member.
- Objective 3 As a participating member of the SkillsUSA student organization, complete the SkillsUSA
  1. Evaluate your career and training goals.
  2. Market your career choice.
  3. Develop personal financial skills



4. Serve as a volunteer in the community.
5. Plan and develop a business.
6. Conduct a worker interview.
7. Develop a résumé and write a cover letter.
8. Demonstrate interviewing skills.
9. Understand the cost of customer service.
10. Identify and apply conflict resolution skills.
11. Demonstrate evaluation skills.
12. Examine workplace ethics: the role of values in making decisions.
13. Perform a skill demonstration.
14. Learn what is contained in Material Safety Data Sheets (MSDS).
15. Perform a self-evaluation of proficiency in program competencies.

Objective 4

Serve as an officer in the school's chapter of SkillsUSA

Objective 5

Participate in an authorized SkillsUSA drafting competition.

Objective 6

Display a professional attitude toward the instructor and peers.



## Digital Print Design Vocabulary:

Color Modes and The Effect on File Size:

Comps:

Continuous Tone:

Converting Fractions to Decimals:

Design Principles:

Determining Column and Roll Size in A Document:

Digital Cameras:

Dot Gain:

Dummy:

Elements of Design:

Encapsulated Postscript (EPS):

Font Types (Open Type, Postscript, True Type):

Halftone:

How Changing Size of Image Effects Resolution:

Illustrator Palettes:

Illustrator Tools:

Illustrator View Options:

Imposition / Types Of Impositions:

InDesign Dialog Boxes:

InDesign Keyboard Shortcuts:

InDesign Palettes:

InDesign Tool Bar:

Layout Elements:

Line Art:

Magnetic vs. Optical Disk Storage:

Metric System (Ruler):



**Photoshop Filters:**

**Photoshop Menus:**

**Photoshop Tools:**

**Points (Measurement):**

**Portable Document Format (PDF):**

**Postscript:**

**Print Proofs:**

**Process Colors:**

**Raster/Bitmap Images:**

**Read Ruler (1/16 Inch):**

**Roughs:**

**Scanners:**

**Scanning Modes:**

**Screen Ruling:**

**Signature:**

**Spot Color:**

**Tagged Image File Format (TIFF):**

**Thumbnails:**

**Type Classifications:**

**Types of Plates:**

**Types of Programs:**

**Typography & Type Terminology:**

**Vector Images:**