STRANDS AND STANDARDS
DIGITAL PRINT DESIGN

Learning that works for Utah
CTE®

Course Description

Create and produce digital print projects that communicates and promotes graphic communication. Develop knowledge and skills relative to the graphic design & 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.

Intended Grade Level	11-12
Units of Credit	0.5
Core Code	40.10.00.00.046
Concurrent Enrollment Core Code	40.10.00.13.046
Prerequisite	Intermediate Graphic Communications
Skill Certification Test Number	567
Test Weight	1.0
License Area of Concentration	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Production Graphics
Endorsement 2	N/A
Endorsement 3	N/A

STRAND 1

Students will be able to understand the introduction to Digital Print Design.

Standard 1

Define graphic communications.

Standard 2

Define design and its role in graphic communications.

Standard 3

Identify the capabilities, advantages, and disadvantages of software programs used in digital print design.

Standard 4

Select appropriate software for given print job.

Standard 5

Demonstrate an understanding of file formats (.ai, .jpg, .png, .psd, .gif, .tif, .indd, .pdf, etc.), file organization, and file naming conventions.

Standard 6

Identify the differences between rater and vector images and file formats.

Standard 7

Demonstrate proficiency in the use of measurement systems utilized in the graphic communications industry [points, picas, standard (inches), metric].

STRAND 2

Students will be able to understand and demonstrate safe practices.

Standard 1

List safety rules involving chemicals and flammable liquids.

Standard 2

Read, comprehend and follow instructions on warning labels.

Standard 3

List the steps to be taken in case of injury in the lab.

Standard 4

Identify locations of first aid kit, eye wash station, MSDS, and safety equipment.

Standard 5

Follow proper safety procedures and dress code when operating equipment.

Standard 6

Demonstrate common sense when working with others.

Standard 7

Pass general lab safety test.

STRAND 3

Students will comprehend and demonstrate the design process.

Standard 1

Apply the design process (thumbnails, rough, comp, etc.).

Standard 2

Identify the elements of design and demonstrate their proper use (lines, shapes, mass, texture, color).

Standard 3

Identify the principles of design and demonstrate their proper use (unity, contrast, proportion, balance, rhythm).

Standard 4

Identify layout elements and demonstrate their proper use (Display type, body type, illustrations, and white space).

Standard 5

Create a design for printing, applying the design process.

STRAND 4

Students will be able to understand and demonstrate the use of typography.

Standard 1

Describe the anatomy of type (baseline, ascenders, descenders, serifs, etc.).

Standard 2

Identify typeface classifications and their uses (Roman, san serif, square serif, black letter/text, script, novelty).

Standard 3

Understand the measurement of type using points.

Standard 4

Demonstrate correct conversion of point to inches.

Standard 5

Identify caps, lowercase, uppercase, small caps, dingbats, symbols, and ligatures.

Standard 6

Identify the basic type styles and their uses (Bold, italics, condensed).

Standard 7

Explain letter spacing, tracking, leading, and kerning of type characteristics.

Standard 8

Explain letter spacing, tracking, leading, and kerning of type characteristics.

Standard 9

Create a design using proper typography concepts.

STRAND 5

Students will be able to understand and demonstrate digital image editing (Photoshop).

Standard 1

Demonstrate a functional knowledge of keyboard shortcuts/menus/tools and procedures for their use in a digital image editing program.

Standard 2

Capture digital images using a scanner and/or a digital camera.

Standard 3

Identify appropriate scanner/program operations for line artwork and continuous tone in both grayscale and color.

Standard 4

Identify high/low resolution images and describe the uses of each.

Standard 5

Edit a raster image (i.e. color correction, levels, cropping, scaling, etc.).

Standard 6

Scale a raster image using the proper settings in order to maintain the appropriate resolution for print or digital media.

Standard 7

Solve mathematical equations as they relate to pixels.

Standard 8

Download a digital image from a stock photography source.

Standard 9

Demonstrate an understanding of additive (RGB) and subtractive (CMYK) color modes.

Standard 10

Identify filters and their uses and create a design using filters.

Standard 11

Identify layers and their uses and create a design using layers.

Standard 12

Demonstrate the use of selection tools (i.e. marquee, magic wand, lasso, etc.).

Standard 13

Demonstrate the use of type tool in Photoshop.

Standard 14

Demonstrate how to perform photo repairs and retouching (i.e. healing brush, clone stamp, content-aware, etc.).

Standard 15

Perform non-destructive editing techniques.

STRAND 6

Students will be able to understand and demonstrate digital illustration (Illustrator).

Standard 1

Demonstrate a functional knowledge of keyboard shortcuts/menus/tools and procedures for their use in a digital illustration program.

Standard 2

Understand the advantages and disadvantages of vector images.

Standard 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.).

Standard 4

Create or trace a drawing/photograph with use of the pen tool.

Standard 5

Edit a vector image, modifying anchor points and paths.

Standard 6

Demonstrate the use of selection tools (i.e. selection, direct selection, magic wand, etc.).

Standard 7

Solve ratio and percent equations.

Standard 8

Create a design using basic shapes and use of transforming tools (i.e. shape tool, pathfinder, transform, etc.).

Standard 9

Create a design using layers.

Standard 10

Create a spot color illustration or logo using Pantone Matching System® (PMS) or other color matching system, and view or print separations.

STRAND 7

Students will be able to understand and demonstrate page layout (InDesign).

Standard 1

Demonstrate a functional knowledge of keyboard shortcuts/menus/tools and procedures for their use in a page layout program.

Standard 2

Design and produce a document using spot color and process color.

Standard 3

Output color separations.

Standard 4

Set text with appropriate margins; formatting; gutters; and, proper leading.

Standard 5

Create a computer generated layout incorporating appropriate marks (i.e. gutters, register marks, trim marks, bleed marks, fold lines, etc.).

Standard 6

Design and produce a document designating appropriate fonts, styles, indents, tabs, tables.

Standard 7

Design and produce a document designating appropriate margins, guides, columns.

Standard 8

Import a graphic image and/or text from an existing file into an InDesign publication.

Standard 9

Demonstrate the procedure for cropping and re-sizing frame for digital images.

Standard 10

Create a printed piece using tints, reverse type, and manipulated type for effect.

Standard 11

Demonstrate use of proofreading (i.e. digital dictionary, spell checker, automatic hyphenation, etc.).

Standard 12

Create documents using grids; templates; master pages; paragraph style sheets; and, character style sheets.

Standard 13

Create a 2-sided, 3-panel, brochure using graphics and text.

Standard 14

Create an imposition for a multiple page document in InDesign.

Standard 15

Preflight and package a native file.

Standard 16

Export a print-ready Portable Document Format (PDF) and/or a raster image using page layout software.

STRAND 8

Students will be able to understand and demonstrate file management.

Standard 1

Identify various digital storage media and file transfer methods.

Standard 2

Understand standard file storage units and terminology (KB, MB, GB, TB, etc.).

Standard 3

Install and organize fonts, identify various font formats and their uses.

Standard 4

Save images and documents into the appropriate file format.

Standard 5

Demonstrate adherence to copyright and trademark laws.

Standard 6

Organize, delete, and rename files according to project requirements.

STRAND 9

Students will be able to understand and demonstrate digital file output.

Standard 1

Define output devices related to print production.

Standard 2

Create an interactive PDF.

Standard 3

Output a design from a graphic software program to be used in a printing process.

Standard 4

Confirm printed product matches given specifications (i.e. product dimensions, color, finishing process, etc.).

Standard 5

Correctly send a file electronically to a specified location.

Standard 6

Output a multi-page document and/or book using appropriate graphic software program.

STRAND 10

Students will understand the importance of career readiness skills as it relates to the workplace and outlined in the SkillsUSA Framework – Level 2.

Standard 1

Understand and demonstrate reliability.
- Determine individual time management skills.
- Explore what's ethical in the workplace or school.
- Demonstrate awareness of government.
- Demonstrate awareness of professional organizations and trade unions.

Standard 2

Understand and demonstrate responsiveness.
- Define the customer.
- Recognize benefits of doing a community service project.
- Demonstrate social etiquette.
- Identify customer expectations.

Standard 3

Understand resiliency.
- Discover self-motivation techniques and establish short-term goals.
- Select characters of a positive image.
- Identify a mentor.

Standard 4

Understand and demonstrate workplace habits.
- Participate in a shadowing activity.
- Explore workplace ethics: codes of conduct.
- Recognize safety issues.
- Perform a skill demonstration.
- Exercise your right to know.

Standard 5

Understand and develop initiative.
- Develop personal financial skills.
- Develop a business plan.
- Investigate entrepreneurship opportunities.

Standard 6

Understand and demonstrate continuous improvement.
- Conduct a worker interview.
- Demonstrate evaluation skills.
- Examine ethics and values in the workplace.
- Develop a working relationship with a mentor.
- Construct a job search network.

Performance Skills

Strand 2: Understand and demonstrate safe practices.
- Pass general lab safety test.

Strand 3: Demonstrate the design process.
- Create a design for printing, applying the design process.

Strand 4: Understand and demonstrate the use of typography.
- Create a design using proper typography concepts.

Strand 5: Understand and demonstrate digital image editing (Photoshop).
- Perform non-destructive editing techniques.

Strand 6: Understand and demonstrate digital illustration (Illustrator).
- Create a design using layers.
- Create a spot color illustration or logo using Pantone Matching System® (PMS) or other color matching system, and view or print separations.

Strand 7: Understand and demonstrate page layout (InDesign).
- Create a printed piece using tints, reverse type, and manipulated type for effect.
- Create documents using grids; templates; master pages; paragraph style sheets; and, character style sheets.
- Create a 2-sided, 3-panel, brochure using graphics and text.
- Create an imposition for a multiple page document in InDesign.
- Preflight and package a native file.
- Export a print-ready Portable Document Format (PDF) and/or a raster image using page layout software.

Strand 8 and 9: Understand and demonstrate digital file output.
- Correctly send a file electronically to a specified location.
- Output a multi-page document using appropriate graphic software program.

Skill Certification Test Points by Strand

Test Name	Test #	Number of Test Points by Strand										Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10		