

STRANDS AND STANDARDS

INTERMEDIATE GRAPHIC COMMUNICATIONS



Course Description

This course is designed to be a continuation of Digital Graphic Arts Intro. The course prepares individuals to apply technical knowledge in the areas of design & layout, related computer and software, safety, printing processes, finishing & binding, and professional skills. The course includes instruction in printing, printing equipment and operation, computer hardware and software, digital imaging, print preparation, and electronic prepress.

Intended Grade Level	10-12
Units of Credit	0.5
Core Code	40.10.00.00.042
Concurrent Enrollment Core Code	N/A
Prerequisite	Digital Graphic Arts Intro
Skill Certification Test Number	562
Test Weight	0.5
License Type	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Graphics/Printing Technology
Endorsement 2	N/A
Endorsement 3	N/A



STRAND 1

Students will be able to understand the introduction to the graphics/printing industry.

Standard 1

Define the role of graphic communications.

Standard 2

Identify print markets and types of print businesses.

Standard 3

Describe major contributions in the history of printing.

Standard 4

Explore printing technologies.

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, SDS, 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.

Performance Skill

Understand and demonstrate safe practices.

- List safety rules involving chemicals and flammable liquids.
- Read, comprehend and follow instructions on warning labels.
- List the steps to be taken in case of injury in the lab.
- Identify locations of first aid kit, eye wash station, MSDS, and safety equipment.

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- Follow proper safety procedures and dress code when operating equipment.
- Demonstrate common sense when working with others.
- Pass general lab safety test.

STRAND 3

Students will be able to understand and demonstrate design processes.

Standard 1

Understand the design process.

Standard 2

Define the principles and elements of design.

Standard 3

Identify typeface classifications and their uses.

Standard 4

Describe the anatomy of type.

Standard 5

Understand point size, leading, and alignment.

Standard 6

Measure type size and line weight in points.

Standard 7

Create a design for printing, applying the design process.

Performance Skill

Understand and demonstrate design processes.

- Understand the design process.
- Define the principles and elements of design.
- Identify typeface classifications and their uses.
- Describe the anatomy of type.
- Understand point size, leading, and alignment.
- Measure type size and line weight in points.
- Create a design for printing, applying the design process.

STRAND 4

Students will be able to understand and demonstrate computer skills.

Standard 1

Select appropriate software types (i.e. word processing, page layout, paint, draw) and related applications.

Standard 2

Identify software interface features (i.e. panels, menus, dialog boxes).

Standard 3

Define hardware and hardware functions as they apply to the graphics industry.

Standard 4

Understand digital publishing technology.

Standard 5

Identify and determine appropriate file formats.

Standard 6

Install fonts.

Standard 7

Perform basic math skills.

Standard 8

Create an interactive PDF.

Performance Skill

Understand and demonstrate computer skills.

- Select appropriate software types (i.e. word processing, page layout, paint, draw) and related applications.
- Identify software interface features (i.e. panels, menus, dialog boxes).
- Define hardware and hardware functions as they apply to the graphics industry.
- Understand digital publishing technology.
- Identify and determine appropriate file formats.
- Install fonts.
- Perform basic math skills.
- Create an interactive PDF.

STRAND 5

Students will be able to understand and demonstrate page layout.

Standard 1

Demonstrate operation of tools, panels, and menus in a page layout application (i.e. InDesign).

Standard 2

Change page layout software defaults.

Standard 3

Define layout elements (body text, display text, illustration and white space).

Standard 4

Demonstrate proper use of guides, margins, columns, gutters, and rows.

Standard 5

Know basic paper sizes and orientations (i.e. letter and tabloid).

Standard 6

Import and modify an image in a page layout program.

Standard 7

Measure linear dimensions in inches and fractions of an inch to 1/16".

Standard 8

Comprehend crop and registration marks.

Standard 9

Define bleeds.

Standard 10

Output color separations.

Standard 11

Perform fraction to decimal conversions.

Standard 12

Create a multi-page layout.

Performance Skill

Understand and demonstrate page layout.

- Demonstrate operation of tools, panels, and menus in a page layout application (i.e. InDesign).
- Change page layout software defaults.
- Define layout elements (body text, display text, illustration and white space).
- Demonstrate proper use of guides, margins, columns, gutters, and rows.
- Know basic paper sizes and orientations (i.e. letter and tabloid).
- Import and modify an image in a page layout program.
- Measure linear dimensions in inches and fractions of an inch to 1/16".
- Comprehend crop and registration marks.
- Define bleeds.
- Output color separations.
- Perform fraction to decimal conversions.
- Create a multi-page layout.

STRAND 6

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

Standard 1

Demonstrate operation of tools, panels, and menus in an image editing application (i.e. Photoshop).

Standard 2

Change image editing software defaults.

Standard 3

Understand the advantages and disadvantages of raster images.

Standard 4

Comprehend pixels, resolution, and interpolation.

Standard 5

Compare line art, continuous tone, and halftone image types.

Standard 6

Capture an image (i.e. digital camera or scanner).

Standard 7

Understand metric prefixes as they relate to file size.

Standard 8

Identify color modes and their uses (i.e. RGB and CMYK).

Standard 9

Utilize multiple selection methods, layers, and channels.

Standard 10

Solve mathematical equations as they relate to pixels.

Standard 11

Edit a color raster image.

Performance Skill

Understand and demonstrate digital image editing.

- Demonstrate operation of tools, panels, and menus in an image editing application (i.e. Photoshop).
- Change image editing software defaults.
- Understand the advantages and disadvantages of raster images.
- Comprehend pixels, resolution, and interpolation.
- Compare line art, continuous tone, and halftone image types.
- Capture an image (i.e. digital camera or scanner).

- Understand metric prefixes as they relate to file size.
- Identify color modes and their uses (i.e. RGB and CMYK).
- Utilize multiple selection methods, layers, and channels.
- Solve mathematical equations as they relate to pixels.
- Edit a color raster image.

STRAND 7

Students will be able to understand and demonstrate digital illustrations.

Standard 1

Demonstrate operation of tools, panels, and menus in an illustration application (i.e. Illustrator).

Standard 2

Change illustration software defaults.

Standard 3

Understand the advantages and disadvantages of raster images.

Standard 4

Comprehend bezier curves, handles, and anchor points.

Standard 5

Comprehend process and spot colors.

Standard 6

Define trapping.

Standard 7

Solve ration and percent equations.

Standard 8

Create and modify a vector image.

Performance Skill

Understand and demonstrate digital illustrations.

- Demonstrate operation of tools, panels, and menus in an illustration application (i.e. Illustrator).
- Change illustration software defaults.
- Understand the advantages and disadvantages of raster images.
- Comprehend bezier curves, handles, and anchor points.
- Comprehend process and spot colors.
- Define trapping.
- Solve ration and percent equations.
- Create and modify a vector image.

STRAND 8

Students will be able to understand and demonstrate printing processes.

Standard 1

Classify the major printing process (flexography, lithography, screen, gravure, and digital).

Standard 2

Identify products produced by each of the major printing processes.

Standard 3

Understand the concept of the image carrier for the major printing process.

Standard 4

Identify other graphics communication processes (i.e. vinyl, engraving, embroidery, etc.).

Standard 5

Know substrate and basic paper grades (i.e. bond and cover).

Standard 6

Produce a multi-color product.

Performance Skill

Understand and demonstrate printing processes.

- Classify the major printing process (flexography, lithography, screen, gravure, and digital).
- Identify products produced by each of the major printing processes.
- Understand the concept of the image carrier for the major printing process.
- Identify other graphics communication processes (i.e. vinyl, engraving, embroidery, etc.).
- Know substrate and basic paper grades (i.e. bond and cover).
- Produce a multi-color product.

STRAND 9

Students will be able to understand and demonstrate finishing and binding processes.

Standard 1

Define finishing.

Standard 2

Identify finishing processes.

Standard 3

Define binding.

Standard 4

Identify binding processes.

Standard 5

Finish or bind a product.

Performance Skill

Understand and demonstrate finishing and binding processes.

- Define finishing.
- Identify finishing processes.
- Define binding.
- Identify binding processes.
- Finish or bind a product.

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.

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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.

Skill Certificate 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		
Intermediate Graphic Communications	562	5	5	7	10	5	5	4	9	5	55	52