



Multiple Category Scope and Sequence: Scope and Sequence Report For Course Standards and Objectives, Content, Skills, Vocabulary

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	Unit	Course Standards and Objectives	Content	Skills	Vocabulary
District Basic <u>Intro to Graphics Communications</u> <u>(10.0301) (District) 2014-2015 Collaboration</u>	<u>Intro to Graphic Communications</u> (Week 1, 2 Weeks)	UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications Standard 1 Students will be able to understand the introduction to the graphics/printing industry. <ul style="list-style-type: none"> ▪ Objective 1: Define graphic communications. ▪ Objective 2: Define printing and identify products produced by printing. ▪ Objective 3: Identify major contributions in the history of printing. ▪ Objective 4: Explain basic printing technologies. ▪ Objective 5: Demonstrate the technical production flow from idea to finished product. 	<ul style="list-style-type: none"> ▪ History of printing ▪ Basic printing technology ▪ Technical production flow 	<ul style="list-style-type: none"> ▪ Explain the history of graphic communications ▪ Identify and describe various printing processes 	<ul style="list-style-type: none"> ▪ Gutenberg ▪ Senefelder ▪ Tsi'lun ▪ Lithography ▪ Gravure ▪ Relief ▪ Flexography ▪ Digital/Impactless ▪ Screen printing
	<u>Safety</u> (Week 2, 2 Weeks)	UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications Standard 2 Students will be able to understand and demonstrate safe practices. <ul style="list-style-type: none"> ▪ Objective 1: List safety rules involving chemicals and 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 	<p><i>Machine Safety</i></p> <ul style="list-style-type: none"> ▪ Guards ▪ Nip point ▪ 1 person at a time ▪ Don't operate until trained and given permission ▪ Proper attire <p>Chemical</p> <ul style="list-style-type: none"> ▪ Don't sniff or taste ▪ Eye safety ▪ Proper disposal ▪ Hand washing ▪ Eating ▪ MSDS 	<ul style="list-style-type: none"> ▪ Demonstrate safe lab practices ▪ List step to be taken in case of injury ▪ Read and identify an MSDS ▪ Pass a lab safety test at 100% ▪ Follow general lab safety procedures 	<ul style="list-style-type: none"> ▪

locations of first aid kit, 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.

- Warning labels
- Spontaneous combustion

General

- First aid
- General common sense

Design &

Typography

3, 2 Weeks) 



UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications Standard 3
Students will be able to understand and demonstrate design processes.

- Objective 1: Understand the design process.
- Objective 2: Define the principles and elements of design.
- Objective 3: Identify typeface classifications.
- Objective 4: Understand point size, leading and alignment.
- Objective 5: Create a design for printing.

Design Process

- Brainstorming
- Thumbnails
- Rough Sketch
- Comprehensive/Final

Elements of Design

- Line
- Shape
- Mass
- Texture
- Color

Principles of Design

- Balance
- Contrast
- Unity
- Proportion
- Rhythm

Typeface Classifications

- Roman
- San Serif
- Square Serif
- Text/Black Letter
- Novelty/Decorative
- Script

Typography

- Demonstrate the design process
- Define the principles and elements of design
- Identify typeface classifications
- Use point size, leading and alignment
- Create a design for printing
- Thumbnails
- Rough sketch
- Elements of design
- Principles of design
- White space
- Typography
- Roman
- San Serif
- Square serif
- Leading
- Flush right
- Flush left
- Center
- Justify

Computer Skills 
(Week 5, 1 Week) 

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications Standard 4
Students will be able to understand and demonstrate computer skills.

- Objective 1: Understand software types (i.e. word processing, page layout, paint, draw) and related applications.
- Objective 2: Identify software interface features (i.e. panels, menus, dialog boxes).
- Objective 3: Define hardware and hardware functions.
- Objective 4: List file types, file formats, and image types.
- Objective 5: Perform basic math skills.
- Objective 6: Create a PDF.

- Point size
- Leading
- Alignment

Software Types

- Word processing
- Page layout
- Paint
- Draw

Software Interface Features

- Panels
- Menus
- Dialog boxes

- Functions of Hardware and Software
- Image types (raster/bitmap and vector)

Different File Types

- jpg/jpeg
- tif/tiff
- pdf
- eps
- ai
- psd
- indd
- png
- gif

- Choose proper software type for application
- Use panels, menus and dialog boxes
- Recognize file formats
- Differentiate between raster/bitmap and vector
- Create a pdf
- Recognize the effect of resolution/dpi on image quality

- File Type
- Vector
- Raster/bitmap
- Panels
- Menus
- Dialog boxes
- Hardware
- Software

Digital Illustration 
(Week 6, 4 Weeks) 

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications Standard 4
Students will be able to understand and demonstrate computer skills.

- Objective 4: List file types, file formats, and image types.
- Objective 5: Perform basic math skills.

- Raster versus vector
- Tool use (pen tools)
- Anchor points and paths
- Panels
- Menus
- How to create a new document in a drawing program

- Create a vector image
- Save documents in a pdf format
- Change sizes by converting fractions to decimals
- Modify a vector image

- Raster
- Vector
- Anchor point
- Handles
- Vector formats (pdf, eps, ai, svg)
- Draw program
- Fill
- Stroke
- Swatch
- Panel

- Objective 6: Create a PDF.

Standard 5

Students will be able to understand and demonstrate page layout.

- Objective 3: Demonstrate proper use of rulers, guides, and margins.
- Objective 5: Measure linear dimensions in inches and fractions of an inch to 1/8".
- Objective 6: Perform fraction to decimal conversions.

Standard 7

Students will be able to understand and demonstrate digital illustrations.

- Objective 1: Know basic operations of tools, panels, and menus in an illustration application (i.e. Illustrator).
- Objective 2: List the advantages & disadvantages of vector images.
- Objective 3: Select and modify a vector image.
- Objective 4: Solve ratio and conversion problems.
- Objective 5: Create a vector image.

Printing Processes



(Week 8, 3 Weeks)

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications
Standard 8
Students will be able to understand and demonstrate printing processes.

- Objective 1: Classify the major printing process (flexography, lithography, screen, gravure, and digital).
- Objective 2: Determine products produced by each

- Printing processes
- Image carriers
- Products produced
- Substrates

- Design a product
- Prepare an image carrier
- Print a product on a substrate

- Relief/flexography
- Offset lithography
- Gravure
- Screen printing
- Impactless/digital
- Substrate
- Image carrier
- Image area
- Non-image area
- Wrong reading
- Right reading

of the major printing process.

- Objective 3: Identify the image and non-image area on an image carrier.
- Objective 4: Define substrate.
- Objective 5: Print a product.

Digital Image Editing



(Week 11, 2 Weeks)



UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications Standard 6

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

- Objective 1: Know basic operations of tools, panels, and menus in an image editing application (i.e. Photoshop).
- Objective 2: Define pixels and resolution.
- Objective 3: Understand the advantages & disadvantages of raster images.
- Objective 4: Acquire a raster image.
- Objective 5: Solve mathematical equations as they relate to pixels.
- Objective 6: Edit a raster image.

- Paint program
- Selection and deselection
- Basic tools in the tool panel
- Resolution
- Layers panel
- Why you use a raster image
- How to calculate resolution

- Acquire and edit a raster image

- Raster
- Resolution
- dpi
- Pixels
- Layers
- Masks
- Foreground
- Background
- Transparency
- Raster file formats (tiff, jpeg, png, gif)

Page Layout



(Week 13, 2 Weeks)



UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications Standard 4

Students will be able to understand and demonstrate computer skills.

- Objective 5: Perform basic math skills.
- Objective 6: Create a PDF.

- How to use InDesign
- Basic tool panel
- Know the elements of layout
- How to work with master pages
- Principles of design
- Typography
- Copy fitting
- How to place an image
- How to place text
- How to create a page

- Use rulers, guides and margins
- Import an image properly
- Export a pdf

- Page layout program
- Leading
- Kerning
- Alignment (center, justify, left, right, force)
- indd
- Columns
- Text Wrap
- Frame
- Margins
- Master pages

Standard 5
Students will be able to understand and demonstrate page layout.

layout

- Place holders

- Objective 1: Know basic operations of tools, panels, and menus in a page layout application (i.e. InDesign).
- Objective 2: Define layout elements (i.e. body type, display type, illustrations, and white space).
- Objective 3: Demonstrate proper use of rulers, guides, and margins.
- Objective 4: Import an image into a page layout program.
- Objective 5: Measure linear dimensions in inches and fractions of an inch to 1/8".
- Objective 6: Perform fraction to decimal conversions.
- Objective 7: Create a page layout.

Printing Processes 2



(Week 15, 3 Weeks)

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications
Standard 8
Students will be able to understand and demonstrate printing processes.

- Objective 1: Classify the major printing process (flexography, lithography, screen, gravure, and digital).
- Objective 2: Determine products produced by each of the major printing process.
- Objective 3: Identify the image and non-image area on an image carrier.
- Objective 4: Define substrate.
- Objective 5: Print a

- Printing processes
- Image carriers
- Products produced
- Substrates

- Design a product
- Prepare an image carrier
- Print a product on a substrate

- Relief/flexography
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- Screen printing
- Impactless/digital
- Substrate
- Image carrier
- Image area
- Non-image area
- Wrong reading
- Right reading

product.

Review & Testing



(Week 18, 2 Weeks)



Professional Skills



(Week 1, 19 Weeks)



UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Introduction to Graphic Communications Standard 9
Students will gain an understanding of Graphic Communications as a profession and will develop professional skills for the workplace.

- Self-motivation techniques
 - how to identify personal learning style
 - how to set short-term goals
 - why we perform community service projects
 - complete self-assessment inventory
 - participate in a shadowing activity
 - define future occupations
 - self-assessment
 - shadowing
 - short-term goal
 - cultural diversity
 - time-management
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- Objective 1: As a participating member of the SkillsUSA student organization complete the SkillsUSA Level 1 Professional Development Program.
 - a. Complete a self-assessment inventory and identify individual learning styles.
 - b. Discover self-motivation techniques and establish short-term goals.
 - c. Determine individual time-management skills.
 - d. Define future occupations.
 - e. Define awareness of cultural diversity and equity issues.
 - f. Recognize the benefits of conducting a community service project.
 - g. Demonstrate effective communication skills with others.
 - h. Participate in a shadowing activity.
 - i. Identify components of an employment portfolio.
 - j. Explore what is ethical in the workplace or school.
 - k. Demonstrate proficiency in program competencies.
 - l. Explore what is ethical in

the workplace or school.
- State the SkillsUSA motto.
- State the SkillsUSA creed.
- Learn the SkillsUSA colors.
- Describe the official SkillsUSA dress.
- Describe the procedure for becoming a SkillsUSA officer.

- Objective 2: Understand the role graphic communications and relate career opportunities.
- Objective 3: Display a professional attitude toward the instructor and peers.

