

# **DIGITAL COMMUNICATIONS I: LAYOUT & DESIGN**

## Curriculum Content Frameworks

**Please note: All assessment questions will be taken from the knowledge portion of these frameworks.**

*Prepared by*

Bonnie Chamberlain, El Dorado High School  
Suzi Cotton, Pea Ridge  
Regina Efrid, Magnet Cove  
Tracy Laird, West Fork

*Facilitated by*

Karen Chisholm, Education and Instruction Manager  
Leisa Edwards, Education and Instruction Coordinator  
Office of Assessment and Curriculum  
Arkansas Department of Career Education

*Edited by*

James Brock, Education and Instruction Manager  
Ginger Fisher, Education and Instruction Coordinator  
LaTrenda Jackson, Education and Instruction Coordinator  
Timothy Johnston, Education and Instruction Coordinator  
Peggy Wakefield, Education and Instruction Coordinator  
Office of Business & Marketing Technology  
Arkansas Department of Career Education

*Disseminated by*

Career and Technical Education  
Office of Assessment and Curriculum  
Arkansas Department of Career Education

# Curriculum Content Frameworks

## DIGITAL COMMUNICATIONS I: LAYOUT & DESIGN

Grade Levels: 10, 11, 12 Course Code: 492150 Units of Credit: .5	Prerequisite: CBA or CA I & II
Course Description: Digital Communications I: Layout & Design is a one-semester course that combines the versatility of the computer with page-design software, enabling students to produce materials of near photo-typed quality. The course includes page composition, layout, design, editing functions and a variety of printing options.	

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# Unit 1: Introduction to Digital Media

## Hours: 3

**Terminology:** Commercial photographer, Copyright laws, Desktop publisher, Desktop publishing, Digital media, Fair use, Freeware, Graphic designer, Multimedia, Photographer, Public domain, Royalty-free, Shareware, Trademark, Videographer, Web developer

CAREER and TECHNICAL SKILLS			
What the Student Should Know		What the Student Should be Able to Demonstrate	
Knowledge		Application	
1.1	Define terminology	1.1.1	Manipulate vocabulary and concepts individually and in groups
1.2	Define digital media and describe various types of publications	1.2.1	Collect and identify desktop publishing examples
		1.2.2	Examine multimedia examples
1.3	Discuss the copyright laws and the applications to desktop publishing	1.3.1	Describe appropriate application of copyright laws & trademarks
		1.3.2	Classify materials as fair use, freeware, royalty-free, public domain, shareware or trademark
1.4	Discuss career opportunities in digital media	1.4.1	Investigate careers in digital media

## Unit 2: Communication of Color

### Hours: 7

**Terminology:** Analogous colors, CMYK, Color scheme, Color theory, Color wheel, Communication of color, Complementary colors, Custom color, Hue, Monochromatic colors, Pantone, Process color, RGB, Saturation, Shade, Split-complementary colors, Spot color, Tint, Triadic colors

<b>CAREER and TECHNICAL SKILLS</b>	
What the Student Should Know	What the Student Should be Able to Demonstrate
<b>Knowledge</b>	<b>Application</b>
2.1 Define terminology	2.1.1 Manipulate vocabulary and concepts individually and in groups
2.2 Discuss color theory and guidelines for selecting color	2.2.1 Explore the use of color to communicate
	2.2.2 Distinguish between basic color schemes: i.e., complementary, split-complementary, analogous, triadic, monochromatic, etc.
	2.2.3 Create custom colors
	2.2.4 Explore color matching systems, i.e., Pantone, Trumatch
	2.2.5 Analyze appropriate use of spot color in publications
	2.2.6 Analyze appropriate use of process color in publications
	2.2.7 Create and print publications using color theory
2.3 Discuss the characteristics of color in digital communications	2.3.1 Distinguish between RGB and CMYK

## Unit 3: Layout and Design

**Hours: 20**

**Terminology:** Accordion fold, Additive color, Alignment, Asymmetrical balance, Balance, Binding, Bond, Card stock, Column, Consistency, Contrast, Flow, Focal point, Gatefold, Half fold, Layout, Legal, Letter, Line, Mass, Mock layout, Newsprint, Optical center, Paper weight, Perfect binding, Ream, Repetition, Row, Saddle stitch, Shape, Space, Spiral binding, Style, Subtractive color, Symmetrical balance, Table of contents, Tabloid, Target audience, Texture, Thumbnail sketch, Time frame, Trifold, Value, White space, Z-pattern

<b>CAREER and TECHNICAL SKILLS</b>			
What the Student Should Know		What the Student Should be Able to Demonstrate	
<b>Knowledge</b>		<b>Application</b>	
3.1	Define terminology	3.1.1	Manipulate vocabulary and concepts individually and in groups
3.2	Discuss basic design principles and elements	3.2.1	Identify examples of basic design principles: alignment, balance, contrast, flow, focal point, repetition
		3.2.2	Identify examples of basic design elements: line, shape, mass, color, value, texture, space
		3.2.3	Critique design layouts
		3.2.4	Create examples using basic design principles and elements
3.3	Discuss pre-planning activities	3.3.1	Describe basic pre-planning activities: target audience, purpose, time frame, layout, delivery
		3.3.2	Develop a time frame for completing a project
		3.3.3	Create and print a mock layout
3.4	Discuss specific costs associated with production	3.4.1	Identify paper sizes
		3.4.2	Identify paper stock
		3.4.3	Demonstrate types of folds
		3.4.4	Identify types of binding
		3.4.5	Create and print publications using various sizes of paper

## Unit 4: Typography

Hours: 15

**Terminology:** 3-D, Ascender, Baseline, Bold, Cap height, Character, Character width, Contoured text, Decorative font, Descender, Dingbat, Drop cap, Em dash, En dash, Font, Font style, Greeking, Hanging indent, Indent, Initial cap, Italics, Kerning, Leading, Orphan, Point, Reverse type, Sans serif, Script, Serif, Shadow, Small cap, Text wrap, Texture, Tracking, Typography, Widow, x-height

<b>CAREER and TECHNICAL SKILLS</b>	
What the Student Should Know	What the Student Should be Able to Demonstrate
<b>Knowledge</b>	<b>Application</b>
4.1 Define terminology	4.1.1 Prepare a list of terms with definitions
4.2 Identify the basic characteristics and classifications of fonts	4.2.1 Label the parts of a character: baseline, x-height, cap height, ascender, descender
	4.2.2 Describe how type is measured
	4.2.3 Identify fonts from the basic categories: serif, sans, serif, decorative, script
4.3 Discuss the guidelines for selecting fonts	4.3.1 Describe appropriate guidelines for selecting point sizes
	4.3.2 Identify examples of appropriate and inappropriate use of fonts
4.4 Discuss basic styles and special formats	4.4.1 Apply styles: bold, italicize, underline, shadow, small cap, outline, 3-D
	4.4.2 Apply special formats: contour, texture, color, drop cap, reverse type, text wrap
4.5 Discuss spacing techniques	4.5.1 Apply spacing techniques: leading, kerning, tracking, etc.
4.6 Review font characteristics, styles, and formats	4.6.1 Create a project incorporating typography

## Unit 5: Publications

**Hours: 15**

Terminology: Bleed, Brochure, Business card, Byline, Clip art, Column, Continuation line, Gutter, Headline, Jumpline, Letterhead, Masthead, Nameplate, Newsletter, PDF, Pull quote

<b>CAREER and TECHNICAL SKILLS</b>			
What the Student Should Know		What the Student Should be Able to Demonstrate	
<b>Knowledge</b>		<b>Application</b>	
5.1	Define terminology	5.1.1	Manipulate vocabulary and concepts individually and in groups
5.2	Discuss the basic layout of a newsletter	5.2.1	Identify basic components of a multi-column newsletter
		5.2.2	Create a multi-column newsletter
		5.2.3	Convert newsletter to PDF file
5.3	Discuss the basic layout of a brochure	5.3.1	Identify basic characteristics of a brochure
		5.3.2	Create a brochure
5.4	Review appropriate uses of layout and design	5.4.1	Create an electronic project
5.5	Discuss the basic layout and size	5.5.1	Create a business cards

# Glossary

## Unit 1: Introduction to Digital Media

1. Commercial photographer – a career that involves taking pictures of subjects such as people, buildings or merchandise to be used in a variety of media
2. Copyright laws – laws designed to protect intellectual property rights and provide potential monetary rewards for inventiveness and hard work
3. Desktop publisher – a career that involves designing and creating the graphics that accompanies text as well as page layouts
4. Desktop publishing – using a computer and software program to produce high quality, printed documents that combine text and graphics
5. Digital media – using technology to convey information
6. Fair use – a section of the U.S. copyright law that allows the use of copyrighted works in reporting news, conducting research, and teaching
7. Freeware – software that is provided without charge
8. Graphic designer – a career that involves designing or creating graphics to meet specific commercial or promotional needs
9. Multimedia – a computer-based communication process that incorporates text, graphics, sound, animation and video
10. Photographer – a person who takes photographs, either as a hobby or a profession
11. Public domain – property rights that belong to the community at large, are unprotected by copyright or patent, and are subject to use by anyone
12. Royalty-free – prepared material that can be used legally, without paying a fee to the artist, publishing company, etc; some royalty-free material is available at no cost, however, most material must be purchased
13. Shareware – copyrighted software that is available free of charge on a trial basis
14. Trademark – a name, symbol, or other device identifying a product; it is officially registered with the U.S. government and its use is legally restricted to its owner
15. Videographer – a career involved in the production of video material
16. Website developer – a career that involves designing, creating, and modifying websites

## Unit 2: Communication of Color

1. Analogous colors – colors located adjacent to each on the color wheel
2. CMYK (Cyan, Magenta, Yellow, Black) – the four ink colors used to create most process color printing
3. Color scheme – an arrangement of colors designed to create a specific response
4. Color theory – relationship between colors often based on their location on a color wheel
5. Color wheel – circle containing a spectrum of color
6. Communication of color – eye/mind perception of color; meanings associated with color
7. Complementary colors – colors located directly opposite one another on the color wheel
8. Custom color – color designed by the user specifically for a document
9. Hue – all tints and shades of a color; red, orange, and blue are all hues
10. Monochromatic colors – all the hues (tints and shades) of a single color
11. Pantone – color matching system that uses a series of cards to identify specific colors
12. Process color – use of many colors in a publication (most commonly CMYK)
13. RGB (red, green, blue) – color model used to display color on computer monitors, televisions, and similar devices
14. Saturation – the intensity of a color; how close it is to a pure hue
15. Shade – created when black is added to a color
16. Split-complementary colors – color scheme consisting of one color combined with the two colors located on either side of its opposite (complementary) color
17. Spot color – a printing technique that uses one premixed color ink for each color used in a publication
18. Tint – created when white is added to a color
19. Triadic colors – using three colors that are equal distance apart on the color wheel

## Unit 3: Layout and Design

1. Accordion fold – a zig zag fold with at least two parallel folds that go in opposite directions; also known as zig-zag
2. Additive color – a color that becomes white when all colors have been added; RGB is an example
3. Alignment – the placement of text or graphics on a line (right, left, center, or justified)
4. Asymmetrical balance – the type of balance when both sides of the central axis are not identical, yet appear to have the same visual weight
5. Balance – use of elements so they counter each other; creates a product that is in harmony
6. Binding – the joining of pages with either wire, glue or other means
7. Bond – standard type of paper used in copiers and printers
8. Card stock – a heavy weight paper; typically used for business cards, greeting cards, post cards, etc.
9. Consistency – maintaining the same layout and style throughout the publication; i.e. fonts, colors, spacing, graphic elements, etc.
10. Contrast – the differences in values, colors, textures, shapes, and other elements within a presentation
11. Flow – the visual path created by the arrangements of elements.
12. Focal point – the visually dominant elements in a presentation; the center of interest
13. Gatefold – folding the sides in toward the middle of a page
14. Half fold – dividing the page in half; often called a booklet fold
15. Layout – the arrangement of all key parts of a publication without including specific content.
16. Legal – a standard American paper size that is 8.5 x 14 inches
17. Letter – a standard American paper size that is 8.5 x 11 inches
18. Line – as a design element, lines can be used to divide or unite elements on a page, denote direction of movement, or anchor objects on a page
19. Mass – the physical or visual size of a publication or an object in the publication.
20. Mock layout – rough draft of the finished publication that shows the major elements of the publication
21. Newsprint – a type of paper that is low quality and inexpensive
22. Optical center – the optical center is slightly to the right of and above the actual center of a page

23. Paper weight – the actual weight in pounds of 500 full sheets of paper regardless of the basic size or grade of paper; paper sizes vary based on the type of paper; also known as ream weight
24. Perfect binding – to bind pages together with glue to create a book
25. Ream – a package of 500 sheets of paper
26. Repetition – the use of the same visual effects a number of times in the same project; the consistent repetition of graphic elements works to create visual unity
27. Row – one of two or more horizontal sections of typed lines lying above or below each other on a page and separated by a rule or a blank space
28. Saddle stitch – a type of binding that staples down the middle of folded pages; frequently used to assemble booklets
29. Shape – a design element that includes geometric, natural, or abstract shapes.
30. Space – space is the distance or area between or around things; space separates or unifies, highlights, and gives the eye a visual rest.
31. Spiral binding – a type of binding that secures pages by using metal combs or plastic combs that fit into holes punched along the edge of the pages; allows the publication to lay flat when opened
32. Style – a named group of character and paragraph format that can be applied to text
33. Subtractive color – color that becomes white when all colors have been removed or subtracted; CMYK colors are called subtractive colors
34. Symmetrical balance – type of balance that occurs when the weight of a composition is evenly distributed around a central vertical or horizontal axis
35. Table of contents – a listing of the major entries in a publication
36. Tabloid – a standard American paper size that is 11 x 17 inches; sometimes referred to as ledger paper
37. Target audience – a specific group of people for which you design your documents; can be categorized by age, gender, income
38. Texture – the surface quality of a shape; i.e., rough, smooth, soft, hard, glossy, etc.: texture can be physical (tactile) or visual
39. Thumbnail sketch – a small sketch that shows only the large elements of the page
40. Time frame – the amount of time given to complete a document or project
41. Trifold – two parallel folds resulting in three panels on each side of the paper; also known as a brochure fold

42. Value – the measure of lightness and darkness in color

43. White space – areas on a page with no text or graphics; designed to provide a visual break and to give other elements on the page a greater impact; also known as negative space

44. Z-pattern – the visual path that draws the eye from top left to top right down to bottom left and then to bottom right

## Unit 4: Typography

1. 3-D – an effect that gives the illusion of depth
2. Ascender – the part of a lowercase character (b, d, f, h, k, l, t) that extends above the x-height
3. Baseline – an imaginary horizontal line along which the base of a letter sets
4. Bold – font style that makes characters appear darker than the surrounding text
5. Cap height – the height of capital letters from the baseline to the top of caps, most accurately measured on a character with a flat bottom (E, H, I, etc.)
6. Character – any written or printed letter, number, or symbol
7. Character width – the horizontal distance of a character
8. Contoured text – text that follows an outline in some type of curved or irregular pattern
9. Decorative font – typefaces designed to attract attention; used in limited situations, mostly in large sizes for headlines or titles (also known as display font)
10. Descender – the part of a character (g, j, p, q, y, and sometimes J) that descends below the baseline
11. Dingbat – a decorative element available in font format
12. Drop cap – the first letter in a story that is enlarged and lowered so the top of the letter is even with the first line of text and the base of the letter drops next to the rest of the paragraph
13. Em dash – a line the width of a capital M in whichever font is being used; is used to indicate a break in thought
14. En dash – a line the width of a capital N in whichever font is being used; is used to connect ranges of numbers, dates, letters
15. Font – a family of alphabetic characters, numbers, punctuation marks and other symbols that share a consistent design; often used synonymously with typeface
16. Font style – the appearance of type (e.g., bold and italics)
17. Greeking – nonsense text used as a placeholder for actual text; also known as lorem ipsum
18. Hanging indent – the first line of a paragraph is flush left, but all remaining lines are indented
19. Indent – a feature that sets a temporary left, right, or left and right margin for paragraph text

20. Initial cap – an enlarged letter that is used as the first character of a paragraph; may be dropped or raised
21. Italics – printed in or using characters that slope to the right
22. Kerning – the adjustment of space between pairs of letters to improve its appearance or alter its fit
23. Leading – the space between lines of text
24. Point – a unit of measurement used to describe the size of text; one point=1/72 of an inch
25. Reverse type – special formatting style that uses light color text on a dark background
26. Sans serif – typeface without serifs
27. Script – formal or informal typefaces designed to imitate handwriting
28. Serif – typeface with projections extending off the main strokes of a character
29. Shadow – a formatting style that adds depth to text or other objects, making them appear more three-dimensional
30. Small cap – smaller uppercase letters that are about the same height as lowercase letters
31. Text wrap – a technique that allows text to flow around a graphic image
32. Texture – a special formatting style creates the illusion of actual textures such as wood, metal, objects in nature, etc.
33. Tracking – adjusting the spacing between words, phrases, and extended blocks of text
34. Typography – the study of all elements of type as a means of visual communication; includes the shape, size, and spacing of characters
35. Widow/orphan – a very short line of text (single sentence or phrase) that appears alone at the end or beginning of a paragraph or column
36. x-height – the height of lowercase letters, specifically the lowercase x, not including ascenders and descenders

## Unit 5: Publications

1. Bleed – the practice of placing an image or color so that it extends to the edge of the page
2. Brochure – a booklet or pamphlet that contains descriptive information or advertising
3. Business card – a small publication (3 1/2 x 2 inches) containing information such as name, title, business, address, phone numbers, logo
4. Byline – the credit line for the author of an article
5. Clip art – ready-made pieces of printed or computerized graphic art
6. Column – a vertical section of text
7. Continuation line – restates the original headline to simplify the process of finding an article that has been continued from a previous page
8. Gutter – the interior space between margins of two facing pages; sometimes used to describe the space between columns
9. Headline – large type running above or beside a story to summarize its content; also called a head, for short
10. Jumpline – type that tells the reader that a story is continued from another page
11. Letterhead – the area on a sheet of stationery where the name, address and other information is printed
12. Masthead – often located on the first inside page or the editorial page of a publication; contains information such as publisher, staff and contact information
13. Nameplate – the section on a newsletter that contains the publication name, date, volume number and logo; generally located at the top of the opening page
14. Newsletter – a printed report or letter containing news of interest to a particular group
15. PDF (Portable Document Format) – an extension for Adobe Acrobat reader files
16. Pull quote – a small amount of text taken from an article that is enlarged and often set off with rules, white space and quotation marks