Digital Print Design

EXAM INFORMATION

Exam Number

568

Items

75

Points

79

Prerequisites

DIGITAL GRAPHIC ARTS II

Recommended Course Length

ONE SEMESTER

National Career Cluster

ARTS, A/V TECHNOLOGY, & COMMUNICATION

MARKETING

Performance Standards

INCLUDED (OPTIONAL)

Certificate Available

YES

DESCRIPTION

Create and produce digital print projects that communicates and promotes 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

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:

Impostion / Types Of Impostions:

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: