Production Graphics I

EXAM INFORMATION	DESCRIPTION
Exam Number 562 **Items** 47 **Points** 58 **Prerequisites** None **Recommended Course Length** One semester **National Career Cluster** Arts, A/V Technology & Communications **Performance Standards** Included (Optional) **Certificate Available** Yes	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.

EXAM BLUEPRINT

STANDARD		PERCENTAGE OF EXAM
1.	Graphics/Printing	3%
2.	Safe Practices	
3.	Design Processes	17%
4.	Computer Skills	16%
5.	Page Layout	21%
6.	Digital Image Editing	10%
7.	Digital Illustrations	12%
8.	Printing Processes	12%
9.	Binding Processes	9%
10.	Professional Skills (optional)	

STANDARD 1

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

Objective 1 Define the role of graphic communications.
Objective 2 Identify print markets and types of print businesses.
Objective 3 Describe major contributions in the history of printing.
Objective 4 Explore printing technologies.

STANDARD 2

Students will be able to understand and demonstrate safe practices

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 locations of first aid kit, eye wash station, SDS, 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 2 Performance Evaluation included below (Optional)

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 and their uses.
Objective 4 Describe the anatomy of type.
Objective 5 Understand point size, leading, and alignment.
Objective 6 Measure type size and line weight in points.

Objective 7 Create a design for printing, applying the design process.

Standard 3 Performance Evaluation included below (Optional)

STANDARD 4

Students will be able to understand and demonstrate computer skills

Objective 1 Select appropriate 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 as they apply to the graphics industry.
Objective 4 Understand digital publishing technology.
Objective 5 Identify and determine appropriate file formats.
Objective 6 Install fonts.
Objective 7 Perform basic math skills.
Objective 8 Create an interactive PDF.

Standard 4 Performance Evaluation included below (Optional)

STANDARD 5

Students will be able to understand and demonstrate page layout

Objective 1 Demonstrate operation of tools, panels, and menus in a page layout application (i.e. InDesign).
Objective 2 Change page layout software defaults.
Objective 3 Define layout elements (body text, display text, illustration, and white space).
Objective 4 Demonstrate proper use of guides, margins, columns, gutters, and rows.
Objective 5 Know basic paper sizes and orientations (i.e. letter and tabloid).
Objective 6 Import and modify an image in a page layout program.
Objective 7 Measure linear dimensions in inches and fractions of an inch to 1/16”.
Objective 8 Comprehend crop and registration marks.
Objective 9 Define bleeds.

Objective 10 Output color separations.
Objective 11 Perform fraction to decimal conversions.
Objective 12 Create a multi-page layout.

Standard 5 Performance Evaluation included below (Optional)

STANDARD 6

Students will be able to understand and demonstrate digital image editing

Objective 1 Demonstrate operation of tools, panels, and menus in an image editing application (i.e. Photoshop).
Objective 2 Change image editing software defaults.
Objective 3 Understand the advantages and disadvantages of raster images.
Objective 4 Comprehend pixels, resolution, and interpolation.
Objective 5 Compare line art, continuous tone, and halftone image types.
Objective 6 Capture an image (i.e. digital camera or scanner).
Objective 7 Understand metric prefixes as they relate to file size.
Objective 8 Identify color modes and their uses (i.e. RGB and CMYK).
Objective 9 Utilize multiple selection methods, layers, and channels.
Objective 10 Solve mathematical equations as they relate to pixels.
Objective 11 Edit a color raster image.

Standard 6 Performance Evaluation included below (Optional)

STANDARD 7

Students will be able to understand and demonstrate digital illustrations

Objective 1 Demonstrate operation of tools, panels, and menus in an illustration application (i.e. Illustrator).
Objective 2 Change illustration software defaults.
Objective 3 Understand the advantages and disadvantages of raster images.
Objective 4 Comprehend Bezier curves, handles, and anchor points.

Objective 5 Comprehend process and spot colors.
Objective 6 Define trapping.
Objective 7 Solve ration and percent equations.
Objective 8 Create and modify a vector image.

Standard 7 Performance Evaluation included below (Optional)

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 Identify products produced by each of the major printing processes.
Objective 3 Understand the concept of the image carrier for the major printing process.
Objective 4 Identify other graphics communication processes (i.e. vinyl, engraving, embroidery, etc.).
Objective 5 Know substrate and basic paper grades (i.e. bond and cover).
Objective 6 Produce a multi-color product.

Standard 8 Performance Evaluation included below (Optional)

STANDARD 9

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

Objective 1 Define finishing.
Objective 2 Identify finishing processes.
Objective 3 Define binding.
Objective 4 Identify binding processes.
Objective 5 Finish or bind a product.

Standard 9 Performance Evaluation included below (Optional)

STANDARD 10

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

Objective 1 Understand and demonstrate reliability.

1. Determine individual time management skills.
2. Explore what's ethical in the workplace or school.
3. Demonstrate awareness of government.
4. Demonstrate awareness of professional organizations and trade unions.

Objective 2 Understand and demonstrate responsiveness.

1. Define the customer.
2. Recognize benefits of doing a community service project.
3. Demonstrate social etiquette.
4. Identify customer expectations.

Objective 3 Understand resiliency.

1. Discover self-motivation techniques and establish short-term goals.
2. Select characters of a positive image.
3. Identify a mentor.

Objective 4 Understand and demonstrate workplace habits.

1. Participate in a shadowing activity.
2. Explore workplace ethics: codes of conduct.
3. Recognize safety issues.
4. Perform a skill demonstration.
5. Exercise your right to know.

Objective 5 Understand and develop initiative.

1. Develop personal financial skills.
2. Develop a business plan.
3. Investigate entrepreneurship opportunities.

Objective 6 Understand and demonstrate continuous improvement.

1. Conduct a worker interview.
2. Demonstrate evaluation skills.
3. Examine ethics and values in the workplace.
4. Develop a working relationship with a mentor.
5. Construct a job search network.

Production Graphics I

Performance assessments may be completed and evaluated at any time during the course. The following performance skills are to be used in connection with the associated standards and exam. To pass the performance standard the student must attain a performance standard average of 8 or higher on the rating scale. Students may be encouraged to repeat the objectives until they average 8 or higher.

Student's Name: _____

Class: _____

PERFORMANCE STANDARDS RATING SCALE



STANDARD 2 – Safe Practices — Score:

Understand and demonstrate safe practices.

- ☐ Demonstrate common sense when working with others.
- ☐ Pass general lab safety test.

STANDARD 3 – Design Processes — Score:

Understand and demonstrate design processes.

- ☐ Create a design for printing, applying the design process.
- ☐ Understand and demonstrate computer skills.
- ☐ Create an interactive PDF.

STANDARD 5 – Page Layout — Score:

Understand and demonstrate page layout.

- ☐ Output color separations.
- ☐ Create a multi-page layout.

STANDARD 6 – Digital Image Editing — Score:

Understand and demonstrate digital image editing.

- ☐ Edit a color raster image.

STANDARD 7 – Digital Illustrations — Score:

Understand and demonstrate digital illustrations.

- ☐ Create and modify a vector image.

STANDARD 8 – Printing Processes Score:

Understand and demonstrate printing processes.

- ☐ Produce a multi-color product.

STANDARD 9 – Finishing and Binding Processes Score:

Understand and demonstrate finishing and binding processes.

- ☐ Finish or bind a product.

PERFORMANCE STANDARD AVERAGE SCORE:

Evaluator Name: _____

Evaluator Title: _____

Evaluator Signature: _____

Date: _____