



Screen Printing Introduction

EXAM INFORMATION

Items

54

Points

64

Prerequisites

NONE

Grade Level

10-12

Course Length

ONE SEMESTER

Career Cluster

ARTS, A/V TECHNOLOGY, AND
COMMUNICATION

Performance Standards

INCLUDED

Certificate Available

YES

DESCRIPTION

Introduction to Screen Printing is designed to provide students with the basic knowledge and skills related to the graphic design and printing industries. Topics include history, design and layout, digital image prep, image assembly/platemaking, press operations, finishing and binding, screen-printing, job application, and interpersonal skills.

EXAM BLUEPRINT

STANDARD	PERCENTAGE OF EXAM
1- Screen Printing Industry	5%
2- Demonstrate Safe Practices	5%
3- Measurement Systems	19%
4- Basic Math Skills	14%
5- Design and Layout	11%
6-Digital Image Preparation	20%
7- Image Capture and Filing	21%
8- Basic Offset Press	3%
9- Screen Preparation Techniques	2%
10- Screen Printing Tools and Equipment (Optional)	
11- Job Application and Interpersonal Skills (Optional)	



STANDARD 1

STUDENTS WILL BE INTRODUCED TO THE SCREEN PRINTING INDUSTRY

- Objective 1 Define graphic communications.
- Objective 2 Define screen-printing and identify products produced by screen-printing.
- Objective 3 List in order the technical production flow from idea to finished product.
- Objective 4 Identify major contributions in the history of screen-printing.
- Objective 5 Comprehend basic screen printing technology.

Standard 1 Performance Evaluation included below (Optional)

STANDARD 2

STUDENTS WILL UNDERSTAND AND DEMONSTRATE SAFE PRACTICES

- Objective 1 List safety rules involving flammable liquids.
- Objective 2 List the steps to be taken in case of injury in the lab.
- Objective 3 Identify location(s) of first aid kit(s).
- Objective 4 Identify location(s) of eyewash station(s).
- Objective 5 Identify where protective safety equipment is located.
- Objective 6 Follow proper safety procedures when operating equipment.
- Objective 7 Follow approved shop dress code for safe operation.
- Objective 8 Pass general lab safety test.
- Objective 9 Read, comprehend, and follow instructions on warning labels and MSDS.
- Objective 10 Demonstrate common sense when working with others.

Standard 2 Performance Evaluation included below (Optional)

STANDARD 3

STUDENTS WILL DEMONSTRATE MEASUREMENT SYSTEMS

- Objective 1 Measure linear dimensions in inches.
- Objective 2 Measure linear dimensions in fractions of an inch.
- Objective 3 Measure linear dimensions in millimeters.
- Objective 4 Identify point sizes for type.
- Objective 5 Demonstrate the use of rulers in a page layout program.

Standard 3 Performance Evaluation included below (Optional)

STANDARD 4

STUDENTS WILL UNDERSTAND AND DEMONSTRATE BASIC MATH SKILLS

- Objective 1 Solve addition of whole number problems.
- Objective 2 Solve addition of fraction problems.



- Objective 3 Solve addition of decimal problems.
- Objective 4 Solve subtraction of whole number problems.
- Objective 5 Solve subtraction of fraction problems.
- Objective 6 Solve subtraction of decimal problems.
- Objective 7 Solve multiplication of whole number problems.
- Objective 8 Solve multiplication of fraction problems.
- Objective 9 Solve multiplication of decimal problems.
- Objective 10 Solve division of whole number problems.
- Objective 11 Solve division of fraction problems.
- Objective 12 Solve division of decimal problems.
- Objective 13 Solve fraction-to-decimal conversion problems.
- Objective 14 Solve decimal-to-fraction conversion problems.
- Objective 15 Solve decimal-to-percent conversion problems.

Standard 4 Performance Evaluation included below (Optional)

STANDARD 5

STUDENTS WILL UNDERSTAND AND DEMONSTRATE DESIGN LAYOUT

- Objective 1 Identify the fundamentals of type.
- Objective 2 Identify appropriate uses of type.
- Objective 3 Identify the basic elements of design.
- Objective 4 Identify appropriate uses of the basic elements of design.
- Objective 5 Identify the basic principles of design.
- Objective 6 Identify appropriate uses of the basic principles of design.
- Objective 7 Identify the basic layout elements.
- Objective 8 Identify appropriate uses of the basic layout elements.
- Objective 9 Produce thumbnails and rough and final layouts.
- Objective 10 Correctly use the fundamentals of type in a final layout.

Standard 5 Performance Evaluation included below (Optional)

STANDARD 6

STUDENTS WILL UNDERSTAND AND DEMONSTRATE DIGITAL IMAGE PREPARATION

- Objective 1 Compare the difference between raster and vector.
- Objective 2 Define computer hardware.
- Objective 3 Define computer software/programs.
- Objective 4 Identify various types of digital storage devices.
- Objective 5 Define file formats and their uses.
- Objective 6 Create a document with appropriate margins in a page layout program.
- Objective 7 Create a document with appropriate formatting in a page layout program.



- Objective 8 Create a vector graphic in a draw program.
- Objective 9 Edit a raster/bitmap graphic in a paint program.
- Objective 10 Import text and images into a page layout document.

Standard 6 Performance Evaluation included below (Optional)

STANDARD 7

STUDENTS WILL UNDERSTAND AND DEMONSTRATE IMAGE CAPTURE AND FILING

- Objective 1 Identify the difference between line art and continuous tone originals.
- Objective 2 Identify basic scanning hardware.
- Objective 3 Identify image and non-image areas on an offset printing plate.
- Objective 4 Capture a digital image with the use of a scanner.
- Objective 5 Produce positive film.

Standard 7 Performance Evaluation included below (Optional)

STANDARD 8

STUDENTS WILL UNDERSTAND AND DEMONSTRATE THE USE OF THE BASIC OFFSET PRESS

- Objective 1 Identify basic screen printing equipment and operations.
- Objective 2 Identify the parts of the screen.
- Objective 3 Identify basic safety and operation procedures for screen-printing.
- Objective 4 Perform basic setup for printing a single-color job.
- Objective 5 Produce a printed single-color screen print.

Standard 8 Performance Evaluation included below (Optional)

STANDARD 9

STUDENTS WILL UNDERSTAND AND DEMONSTRATE SCREEN PREPARATION TECHNIQUES

- Objective 1 Define screen tension parameters.
- Objective 2 Identify screen fabric classifications.
- Objective 3 Identify mesh count
- Objective 4 Identify screen frame types.
- Objective 5 Properly degrease and abrade a screen.
- Objective 6 Identify hand cut screen stencils.
- Objective 7 Identify indirect screen stencils.
- Objective 8 Identify direct screen stencils.
- Objective 9 Properly reclaim a screen.

Standard 9 Performance Evaluation included below (Optional)



STANDARD 10 (Optional)

STUDENTS WILL UNDERSTAND AND DEMONSTRATE SCREEN PRINTING TOOLS AND EQUIPMENT

- Objective 1 Identify squeegee durometer.
- Objective 2 Identify squeegee blades.
- Objective 3 Identify squeegee handles.
- Objective 4 Set up for a single-color screen print.
- Objective 5 Produce a single-color screen print.

Standard 10 Performance Evaluation included below (Optional)

STANDARD 11 (Optional)

STUDENTS UNDERSTAND AND DEMONSTRATE SKILLS RELATED TO JOB APPLICATION AND INTERPERSONAL SKILLS

- Objective 1 Demonstrate proper work ethics.
- Objective 2 Demonstrate proper work habits.
- Objective 3 Identify personal interests.
- Objective 4 Work effectively as a team member
- Objective 5 Communicate effectively.



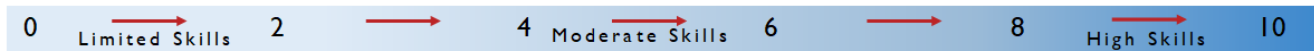
Screen Printing Introduction Performance Standards (Optional)

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**.

Students Name _____

Class _____

PERFORMANCE RATING SCALE



STANDARD 1 Screen Printing

Score:

- Define graphic communications
- Define screen printing and identify products produced by screen printing
- List in order the technical production flow from idea to finished product
- Identify major contributions in the history of screen printing
- Comprehend basic screen printing technology

STANDARD 2 Safe Practices

Score:

- List safety rules involving chemicals and flammable liquids
- Identify location(s) of first aid kit(s)
- Identify where protective safety equipment is needed
- Follow approved shop dress code for safe operation
- Pass general lab safety test
- List steps to be taken in case of injury in lab
- Identify location(s) of eye wash station(s)
- Follow proper safety procedures when operating equipment
- Read, Comprehend, and follow instructions on warning labels and MSDS
- Demonstrate common sense working with others

STANDARD 3 Measurement Systems

Score:

- Measure linear dimensions in:
 - Inches
 - Fractions of inches
 - Millimeters
- Demonstrate the use of rulers in a page layout program
- Identify point sizes for type

STANDARD 4 Basic Math Skills

Score:

- Solve addition, subtraction, multiplication and division problems:
 - Whole Numbers
 - Fractions



- Decimals
- Solve conversion problems:
 - Fractional-decimal
 - Decimal-fractional
 - Decimal-percent

STANDARD 5 Design and Layout

Score:

- Identify and demonstrate the appropriate uses for the basic:
 - Elements of design
 - Layout elements
 - Fundamentals of type
 - Principles of design
- Produce thumbnails, rough, and final layouts
- Correctly use the fundamentals of type in a final layout

STANDARD 6 Digital Image Preparation

Score:

- Create a document with appropriate margins and formatting in a page layout program
- Import text and images into a page layout document
- Define computer:
 - Hardware
 - Software/programs
 - File format and uses
- Compare between raster and vector
- Edit raster/bitmap graphic in paint program
- Create vector graphics in draw program

STANDARD 7 Image Capture and Filing

Score:

- Identify the difference between line art and continuous tone originals
- Identify basic scanning hardware
- Identify image and non-image areas on a screen printing stencil
- Capture a digital image with the use of a scanner
- Produce a page for offset printing

STANDARD 8 Screen Preparation

Score:

- Define screen tension parameters and identify
 - Frame types
 - Mesh count
 - Fabric classification
- Identify screen stencil types:
 - Hand-cut
 - Indirect
 - Direct
- Properly degrease and abrade and reclaim a screen

STANDARD 9 Screen Printing Tools and Equipment

Score:

- Identify squeegee:
 - Durometer
 - Blades



- Handles
- Set up and produce a single-color screen print

STANDARD 10 Professional Skills in the Workplace

Score:

- Demonstrate proper work ethic and habits
- Work effectively as a team member
- Show effective communication with others
- Identify personal interests

PERFORMANCE STANDARD AVERAGE SCORE: