



# GRAPHIC COMMUNICATIONS

## Introduction to Screen Printing

This course is designed to provide students with the basic knowledge and skills related to the graphic design and printing industries. Includes instruction and hands-on assignments in the following areas: History, design & layout, digital image prep, image assembly/platemaking, press operations, finishing & binding, screen printing, job application & interpersonal skills. The curriculum is based on PrintED competencies.

**USOE**  
**7/21/2008**

# INTRODUCTION TO SCREEN PRINTING

Levels: Grades 10-12  
Units of Credit: Minimum 0.5  
CIP Code: 10.0301  
Prerequisite: None

## COURSE DESCRIPTION

### CORE STANDARDS, OBJECTIVES, AND INDICATORS

**STANDARD 100305-01**      **Students will be able to understand the introduction to the screen printing industry.**

#### **OBJECTIVES**

100305-0101      Define graphic communications.  
100305-0102      Define screen printing and identify products produced by screen printing.  
100305-0103      List in order the technical production flow from idea to finished product.  
100305-0104      Identify major contributions in the history of screen printing.  
100305-0105      Comprehend basic screen printing technology.

**STANDARD 100305-02**      **Students will be able to understand and demonstrate safe practices.**

#### **OBJECTIVES**

100305-0201      List safety rules involving flammable liquids.  
100305-0202      List the steps to be taken in case of injury in the lab.  
100305-0203      Identify location(s) of first aid kit(s).  
100305-0204      Identify location(s) of eye wash station(s).  
100305-0205      Identify where protective safety equipment is needed.  
100305-0206      Follow proper safety procedures when operating equipment.  
100305-0207      Follow the approved shop dress code for safe operation.  
100305-0208      Pass the general lab safety test.  
100305-0209      Read, comprehend, and follow instructions on warning labels.  
100305-0210      Demonstrate common sense when working with others.

**STANDARD 100305-03**      **Students will be able to understand and demonstrate measurement systems.**

#### **OBJECTIVES**

100305-0301      Measure linear dimensions in inches.  
100305-0302      Measure linear dimensions in fractions of an inch.  
100305-0303      Measure linear dimensions in millimeters.  
100305-0304      Identify point sizes for type.

100305-0305 Demonstrate the use of rulers in a page layout program.

**STANDARD**            **Students will be able to understand and demonstrate basic**  
**100305-04**            **math skills .**

**OBJECTIVES**

- 100305-0401 Solve addition of whole number problems.
- 100305-0402 Solve addition of fraction problems.
- 100305-0403 Solve addition of decimal problems.
- 100305-0404 Solve subtraction of whole number problems.
- 100305-0405 Solve subtraction of fraction problems.
- 100305-0406 Solve subtraction of decimal problems.
- 100305-0407 Solve multiplication of whole number problems.
- 100305-0408 Solve multiplication of fraction problems.
- 100305-0409 Solve multiplication of decimal problems.
- 100305-0410 Solve division of whole number problems.
- 100305-0411 Solve division of fraction problems.
- 100305-0412 Solve division of decimal problems.
- 100305-0413 Solve fraction-to-decimal conversion problems.
- 100305-0414 Solve decimal-to-fraction conversion problems.
- 100305-0415 Solve decimal-to-percent conversion problems.

**STANDARD**            **Students will be able to understand and demonstrate design and**  
**100305-05**            **layout.**

**OBJECTIVES**

- 100305-0501 Identify the basic fundamentals of type.
- 100305-0502 Identify appropriate uses of type.
- 100305-0503 Identify the basic elements of design.
- 100305-0504 Identify appropriate uses of the basic elements of design.
- 100305-0505 Identify the basic principles of design.
- 100305-0506 Identify appropriate uses of the basic principles of design.
- 100305-0507 Identify the basic layout elements.
- 100305-0508 Identify appropriate uses of the basic layout elements.
- 100305-0509 Produce thumbnails, rough, and final layouts.
- 100305-0510 Correctly use the basic fundamentals of type in a final layout.

**STANDARD**            **Students will be able to understand and demonstrate Digital**  
**100305-06**            **Image Preparation.**

**OBJECTIVES**

- 100305-0601 Compare the difference between raster and vector.
- 100305-0602 Define computer hardware.
- 100305-0603 Define computer software/programs.
- 100305-0604 Identify various types of digital storage devices.
- 100305-0605 Define file formats and their uses.

- 100305-0606 Create a document with appropriate margins in a page layout program.
- 100305-0607 Create a document with appropriate formatting in a page layout program.
- 100305-0608 Create a vector graphic in a draw program.
- 100305-0609 Edit a raster/bitmap graphic in a paint program.
- 100305-0610 Import text and images into a page layout document.

**STANDARD 100305-07 Students will be able to understand and demonstrate image capture and filing.**

**OBJECTIVES**

- 100305-0701 Identify the difference between line art & continuous tone originals.
- 100305-0702 Identify basic scanning hardware.
- 100305-0703 Identify image & non-image areas on a offset printing plate.
- 100305-0704 Capture a digital image with the use of a scanner.
- 100305-0705 Produce positive film.

**STANDARD 100305-08 Students will be able to understand and demonstrate the use of the basic offset press.**

**OBJECTIVES**

- 100305-0801 Identify basic screen printing equipment and operations.
- 100305-0802 Identify the parts of the screen.
- 100305-0803 Identify basic safety and operation procedures for screen printing.
- 100305-0804 Perform basic setup for printing a single-color job.
- 100305-0805 Produce a printed single-color screen print.

**STANDARD 100305-09 Students will be able to understand and demonstrate screen preparation techniques.**

**OBJECTIVES**

- 100305-0901 Define screen tension parameters.
- 100305-0902 Identify screen fabric classifications.
- 100305-0903 Identify mesh count
- 100305-0904 Identify screen frame types.
- 100305-0905 Properly degrease and abraided a screen.
- 100305-0906 Identify hand cut screen stencils.
- 100305-0907 Identify indirect screen stencils.
- 100305-0908 Identify direct screen stencils.
- 100305-0909 Properly reclaim a screen.

**STANDARD 100305-10 Students will be able to understand and demonstrate screen printing tools and equipment.**

**OBJECTIVES**

- 100305-1001 Identify squeegee durometer.
- 100305-1002 Identify squeegee blades.
- 100305-1003 Identify squeegee handles.
- 100305-1004 Set up for a single color screen print.
- 100305-1005 Produce a single color screen print.

**STANDARD 100305-11**      **Students will be able to understand and demonstrate skills related to job application and interpersonal skills.**

**OBJECTIVES**

- 100305-1101 Demonstrate proper work ethics.
- 100305-1102 Demonstrate proper work habits.
- 100305-1103 Identify personal interests.
- 100305-1104 Work effectively as a team member.
- 100305-1105 Communicate effectively.

**PROFESSIONAL DEVELOPMENT**

**STANDARD 100305-12**      **Students will be able to understand and demonstrate skills related to professional development.**

**OBJECTIVES**

- 100305-1201 Complete a personal inventory.
- 100305-1202 Set and meet goals.
- 100305-1203 Be self-motivated.
- 100305-1204 Know how to make decisions.
- 100305-1205 Know how to manage time.
- 100305-1206 Organize personal belongings and lab equipment.
- 100305-1207 Learn to communicate verbally.
- 100305-1208 Write effective communications.
- 100305-1209 Establish a personal reading program.
- 100305-1210 Develop effective work skills and attitudes.
- 100305-1211\* Master a working knowledge of SkillsUSA.
  - 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.

**STANDARD 100305-13**      **Students will be able to understand and demonstrate skills related to leadership.**

**OBJECTIVES**

- 100305-1301 Serve on a committee.
- 100305-1302 Prepare an agenda.
- 100305-1303 Assist in planning a meeting.

- 100305-1304 Review basic parliamentary procedure.
  - Make a main motion.
- 100305-1305 Participate in a school project.
- 100305-1306 Attend a community meeting.
- 100305-1307 Practice effective speaking.
- 100305-1308 Present a three- to five-minute talk.
- 100305-1309 Implement a leadership project.
- 100305-1310\* Master a working knowledge of SkillsUSA.
  - Describe the meaning of the SkillsUSA emblem.
  - State the SkillsUSA pledge.
  - Describe the duties of a SkillsUSA officer.

**STANDARD 100305-14**      **Students will be able to understand and demonstrate skills related to career planning.**

**OBJECTIVES**

- 100305-1401 Define your future occupation.
- 100305-1402 Survey employment opportunities.
- 100305-1403 Report on a trade journal article.
- 100305-1404 Explore opportunities for advanced training.
- 100305-1405 Conduct a worker interview.
- 100305-1406 Contact a professional association.
- 100305-1407 Explore entrepreneurship opportunities.
- 100305-1408 Give a talk about your career.
- 100305-1409 Review career goals.

**STANDARD 100305-15**      **Students will be able to understand and demonstrate skills related to employment.**

**OBJECTIVES**

- 100305-1501 Develop a list of work standards to follow at school and on the job.
  - 100305-1502 Evaluate your personal ethics.
    - Evaluate your personal ethics against acceptable workplace ethics.
  - 100305-1503 Build a job search network.
  - 100305-1504 Find job leads.
  - 100305-1505 Write a resume.
  - 100305-1506 Create a job portfolio.
  - 100305-1507 Complete a job application.
  - 100305-1508 Write a business letter and memo.
  - 100305-1509 Participate in an actual or simulated job interview.
- \* SkillsUSA PDP requirements - recommended.