



## Graphic Arts/Printing Skill Standards Checklist

**CERTIFICATION AREAS COMPLETED:** Student Name \_\_\_\_\_

**Core Modules** (all required) School District \_\_\_\_\_

Fundamentals of Graphic Arts/Printing:\*  
     *Introduction to the Printing Industry*  
     *Electronic Imaging/Publishing*  
     *Image Assembly*

YA Consortium \_\_\_\_\_  
 YA Coordinator \_\_\_\_\_

Finishing, Binding and Distribution Activities\*  
 Core Abilities\*  
 Safety, Security and Emergency Procedures\*

**High School Diploma/GED/HSED**  
**Date Received** \_\_\_\_\_

**Elective Modules** (minimum of one required)\*

Image Transfer-Offset       Image Transfer-Flexography  
 Image Transfer-Screen       Image Transfer-Roto Gravure

A minimum of 900 work hours

**Level One Requirements:** Specific competencies within above \* areas,  
 (see scoring requirements following each section.)  
 A minimum of 450 work hours.

**Work Based Learning:**

Total Hours Employed	Company Name	Phone #
_____	_____	_____
_____	_____	_____
_____	_____	_____

*Please sign this page if you have been a mentor, trainer or instructor of this student.*

**CERTIFICATION:** I certify that this student has successfully completed the competencies required in my department.

\_\_\_\_\_ **Mentor/Trainer Signature** \_\_\_\_\_ Printed Name  
\_\_\_\_\_ Department \_\_\_\_\_ Date Signed

\_\_\_\_\_ **Mentor/Trainer Signature** \_\_\_\_\_ Printed Name  
\_\_\_\_\_ Department \_\_\_\_\_ Date Signed

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\_\_\_\_\_ Department \_\_\_\_\_ Date Signed

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\_\_\_\_\_ Department \_\_\_\_\_ Date Signed

\_\_\_\_\_ **Instructor Signature** \_\_\_\_\_ **Instructor Signature**  
\_\_\_\_\_ Printed Name \_\_\_\_\_ Printed Name  
\_\_\_\_\_ Date Signed \_\_\_\_\_ Date Signed

\_\_\_\_\_ **Instructor Signature** \_\_\_\_\_ **Instructor Signature**  
\_\_\_\_\_ Printed Name \_\_\_\_\_ Printed Name  
\_\_\_\_\_ Date Signed \_\_\_\_\_ Date Signed

# Core Abilities

Required

Core abilities address broad knowledge, skills, and attitudes that go beyond the context of a specific course. Core abilities are not taught in specific lessons. These are the employability skills that are critical for success in the printing industry.

**RATING:**

**3 = Able to perform at entry level/consistently displays this behavior**

**2 = Limited skill/often displays this behavior**

**1 = Needs improvement/rarely displays this behavior**

	<u>Score</u>		
1. Works productively	3	2	1
2. Learns effectively	3	2	1
3. Communicates clearly with supervisor and others	3	2	1
4. Works cooperatively with others	3	2	1
5. Acts responsibly	3	2	1
6. Thinks critically and creatively	3	2	1
7. Works as a team member	3	2	1
8. Demonstrates confidentiality	3	2	1
9. Demonstrates an understanding of customer service functions	3	2	1

**All competencies in this section must be rated at a level 2 or higher**

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Safety, Security, and Emergency Procedures

Required

**RATING:**

**3 = Able to perform at entry level/consistently displays this behavior**

**2 = Limited skill/often displays this behavior**

**1 = Needs improvement/rarely displays this behavior**

	<u>Score</u>		
1. Recognizes safe and unsafe work habits	3	2	1
2. Demonstrates/understands proper worksite safety procedures	3	2	1
3. Demonstrates/describes processes & procedures to be followed at the worksite to report injuries and accidents.	3	2	1

**All competencies in this section must be rated at a level 3**

**Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Fundamentals of Graphic Arts/Printing:

Required

## RATING:

3 = Moderately skilled, can complete job with limited supervision

2 = Limited skill, requires instruction and close supervision.

1 = Exposed to the concept, but no hands on experience.

\* - Identifies Mandatory Level One Competencies

### Overview of the Printing Industry

#### Score

* 1. Compare major printing processes	3	2	1
* 2. Describe production flow	*3	2	1
3. Explain strengths and limitations of desktop publishing vs. other composition systems	3	2	1
* 4. Describe printing industry	*3	2	1
* 5. Demonstrate hazard communications training	*3	2	1

### Estimating

6. Estimate price list and budgeted hourly rate job cost	3	2	1
7. Use job cost estimating computer software	3	2	1

### Pre-Press

* 8. Describe pre-press operations	*3	2	1
* 9. Demonstrate pre-press principles/use of camera	*3	2	1
*10. Demonstrate exposure to camera and light sensitive materials	*3	2	1
*11. Describe the difference between line and half-tones	*3	2	1

### Image Assembly

12. Strip/register a four color process	3	2	1
13. Demonstrate an understanding of screen values and angles	3	2	1
14. Cut half-tone - block out mask	3	2	1

### Mock-up Impositions – Nesting

*15. Demonstrate sheet wise, work & tumble, work & turn	*3	2	1
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<b>Contacting</b>	<b><u>Score</u></b>
*16. Produce contacts	*3 2 1
17. Produce dupes	3 2 1
18. Produce composite dupes	3 2 1
19. Produce composite contacts	3 2 1
 <b>Proofing</b>	
20. Make four color analog proofs	3 2 1
21. Make blueline proofs	3 2 1
22. Make spot color proofs	3 2 1
 <b>Layouts</b>	
*23. Make layout sketches for production work	*3 2 1
*24. Assemble masking sheets	*3 2 1
*25. Produce plates	*3 2 1
26. Determine substrate and appropriate processes	3 2 1
 <b>Customer Service</b>	
*27. Demonstrate understanding of customer service functions	*3 2 1
 <b>General Electronic Publishing</b>	
*28. Perform basic computer procedures	*3 2 1
*29. Identify hardware components of a desktop publishing system	*3 2 1
*30. Identify software components of a desktop publishing system	*3 2 1
*31. Perform basic file management techniques	*3 2 1
*32. Telecommunicate files	*3 2 1
33. Preflight files for production	3 2 1
*34. Demonstrate enlargement and reduction on digital files	*3 2 1
35. Demonstrate half tone screen ruling and image resolution	3 2 1
*36. Demonstrate a working knowledge of trapping	*3 2 1
*37. Demonstrate imposition and RIPping	*3 2 1
38. Perform film processor operation and maintenance	3 2 1
*39. Perform digital proofing	*3 2 1

**Basic Design****Score**

- |   |    |   |   |
|---|----|---|---|
| *40. Apply basic design principles to preparation of art and copy for print media | *3 | 2 | 1 |
| *41. Use color in a manner that adheres to basic color theory principles          | *3 | 2 | 1 |
| *42. Use fonts and topography as design element                                   | *3 | 2 | 1 |

**Electronic Page Lay-Out**

- |   |    |   |   |
|---|----|---|---|
| *43. Perform simple Desktop Publishing operations to build documents  | *3 | 2 | 1 |
| *44. Import and control text created in other programs                | *3 | 2 | 1 |
| *45. Import and control graphics created in other programs            | *3 | 2 | 1 |
| *46. Select appropriate page layout software for a given job          | *3 | 2 | 1 |
| 47. Perform advanced Desktop Publishing operations to build documents | 3  | 2 | 1 |

**Draw Graphics (Object Oriented Graphics)**

- |   |    |   |   |
|---|----|---|---|
| *48. Use object oriented graphics software              | *3 | 2 | 1 |
| 49. Modify existing object oriented graphics (clip art) | 3  | 2 | 1 |
| 50. Import and vectorize (trace) bitmaps                | 3  | 2 | 1 |

**Paint Graphics (Bitmapped Graphics)**

- |  |    |   |   |
|--|----|---|---|
| *51. Use bitmap graphics software                            | *3 | 2 | 1 |
| 52. Produce grayscale bitmap graphics using a paint program  | 3  | 2 | 1 |
| 53. Produce full color bitmap graphics using a paint program | 3  | 2 | 1 |
| 54. Use a scanner to produce graphics                        | 3  | 2 | 1 |

<b>Total # of items completed with a level 1 or higher rating _____ (54 required to pass this section)</b>
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<b>Total # of items completed with a level 3 rating _____ (43 required to pass this section)</b>
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**\*\*Level One Scoring\*\***

<b>Total # of * items completed with a level 1 or higher rating _____ (32 required to pass this section)</b>
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<b>Total # of * items completed with a level 3 rating _____ (25 required to pass this section)</b>
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**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Finishing, Binding and Distribution Activities

Required

## RATING:

2 = Limited skill, requires instruction and close supervision.

1 = Exposed to the concept, either at the worksite or in the classroom

\* - Identifies Mandatory Level One Competencies

### Post Press: Finishing

### Score

1. Drill/punch	2	1
2. Perform paper cutting calculations /cutting/trimming	2	1
3. Labeling	2	1
4. Scoring	2	1
5. Tipping	2	1
6. Folding	2	1
7. Perforation	2	1
*8. Cartoning/boxing finished product for shipping	*2	1
9. In line mailing operations	2	1
10. Imprinting	2	1
11. Ink jet	2	1
12. Laminating/slitting	2	1
13. Die cutting	2	1
14. Round cornering	2	1
15. Embossing/foil stamping/forming	2	1
16. Poly-wrapping/shrink wrapping	2	1
17. Collate/gathering/inserting	2	1
*18. Quality control & testing of product	*2	1
19. Converting	2	1

### Post Press: Binding

20. Perfect bound/adhesive binding	2	1
21. Saddle stitch	2	1

**Post Press: Binding - continued**

**Score**

22. Side stitch	2	1
23. Spiral	2	1
24. 3 ring	2	1
25. Plastic comb	2	1
26. Wire O	2	1
27. Case binding/hard cover	2	1

**Post Press: Distribution**

28. Smyth sewn	2	1
29. Sorting for distribution - internal & external	2	1
30. Data file for mail distribution	2	1
*31. Traffic - includes UPS, Federal Express - Understanding paper work	*2	1
*32. Warehousing/inventory - Understanding paper work	*2	1
33. Mail stream/postal regulations/manifest shipping	2	1

**Total # of items completed with a level 1 or higher rating \_\_\_\_\_ (33 required to pass this section)**

**\*\*Level One Scoring\*\***

**Total # of items completed with a level 1 or higher rating \_\_\_\_\_ (15 required to pass this section)  
All \* items required**

**Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**RATING**

**3 = Moderately skilled, can complete job with limited supervision**

**2 = Limited skill, requires instruction and close supervision.**

**1 = Exposed to the concept, but no hands on experience.**

**\* - Identifies Mandatory Level One Competencies**

**Platemaking and Proofing****Score**

1. Perform electronic distortion and trapping for rubber and photopolymer printing plates	3	2	1
2. Produce molded rubber printing plates	3	2	1
*3. Produce a photopolymer plate exposure test	*3	2	1
4. Produce photopolymer plates for narrow and wide web flexographic presses	3	2	1
5. Operate and maintain platemaking processors	3	2	1
6. Mount and proof a job for a press run using the mounter/proofer machine and web layout techniques	3	2	1
*7. Use mounting systems and alternate methods of plate mounting	*3	2	1

**Substrates and Inks**

8. Summarize the use of substrates for flexographic printing	3	2	1
*9. Summarize the composition and properties of ink	*3	2	1
*10. Use ink room equipment to prepare inks	*3	2	1
*11. Summarize viscosity and pH and discuss how it relates to print quality	*3	2	1
12. Use laboratory testing, press side, quality control, and problem solving skills associated with flexographic inks	3	2	1
*13. Properly label, handle and store inks	*3	2	1

**Press and Production**

14. Distinguish flexographic press configurations	3	2	1
*15. Locate press components and discuss each function	*3	2	1
16. Describe the functions of cylinders and gears used on a flexographic printing press	3	2	1
*17. Summarize inking systems and their uses	*3	2	1
*18. Follow safety procedures during press operation	*3	2	1

**Press and Production - continued**

**Score**

*19. Assist/produce single color jobs on a narrow web press	*3	2	1
20. Assist/produce single color jobs on a wide web press	3	2	1
21. Assist/produce multi-color jobs on a narrow web press	3	2	1
22. Assist/produce multi-color jobs on a wide web press	3	2	1
23. Assist/produce process printing on narrow or wide web flexographic presses	3	2	1
24. Perform basic maintenance	3	2	1
*25. Perform quality control standards	*3	2	1

<p><b>Total # of items completed with a level 1 or higher rating _____ (25 required)</b></p> <p><b>Total # of items completed with a level 2 or higher rating _____ (22 required)</b></p> <p><b>**Item #18 must be completed with a level 3 rating**</b></p>
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<p><b>**Level One Scoring**</b></p> <p><b>Total # of items completed with a level 1 or higher rating _____ (15 required)</b></p> <p><b>Total # of * items completed with a level 2 or higher rating _____ (11 required)</b></p> <p><b>**Item #18 must be completed with a level 3 rating**</b></p>
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**Comments:** \_\_\_\_\_

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**RATING****3 = Moderately skilled, can complete job with limited supervision****2 = Limited skill, requires instruction and close supervision.****1 = Exposed to the concept, but no hands on experience.****\* - Identifies Mandatory Level One Competencies**

<b>Gravure Cylinders</b>	<u>Score</u>		
1. Assist/produce dechrome and cut cylinders	3	2	1
2. Assist/produce copper plate cylinders	3	2	1
3. Assist/Produce chromium cylinders using semi-automated operations	3	2	1
<b>Cylinder Engraving</b>			
4. Download customer files	3	2	1
5. Assist/produce imposition of files	3	2	1
6. Assist/produce making form proofs	3	2	1
*7. Assist/produce set up of engraving machine	*3	2	1
<b>Proofing/Mark-up/Cylinder Corrections</b>			
8. Assist/produce wet proofs	3	2	1
9. Observe and describe evaluation of wet proofs	3	2	1
10. Observe/practice cylinder corrections using acid etch, lacquer and buff methods	3	2	1
<b>Roto Gravure Press</b>			
*11. Operate and practice gravure press safety	*3	2	1
12. Assist in set up and maintaining a paper system	3	2	1
13. Assist in set up and maintaining an ink system	3	2	1
14. Assist in set up and maintaining compensators	3	2	1
*15. Assist in set up and maintaining register controls	*3	2	1
16. Assist in set up of folding and finishing system	3	2	1
*17. Summarize cylinder sizes and press cutoff as it relates to imposition	*3	2	1
18. Summarize ribbon and roll width as it relates to imposition	3	2	1

**Roto Gravure Press – continued**

**Score**

19. Summarize product delivery methods as they relate to imposition 3 2 1

**Gravure Inks and Substrates**

\*20. Summarize the use of substrates for roto gravure printing \*3 2 1

\*21. Summarize the composition and properties of inks \*3 2 1

\*22. Use ink room equipment to prepare inks \*3 2 1

23. Use laboratory testing, press side, quality control and problem solving skills associated with gravure inks 3 2 1

\*24. Properly handle and store inks \*3 2 1

<p><b>Total # of items completed with a level 1 or higher rating _____ (24 required)</b></p> <p><b>Total # of items completed with a level 2 or higher rating _____ (22 required)</b></p> <p><b>**Item #11 must be completed with a level 3 rating**</b></p>
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<p><b>**Level One Scoring**</b></p> <p><b>Total # of items completed with a level 1 or higher rating _____ (10 required)</b></p> <p><b>Total # of * items completed with a level 2 or higher rating _____ (8 required)</b></p> <p><b>**Item #11 must be completed with a level 3 rating**</b></p>
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**Comments:** \_\_\_\_\_

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**RATING**

**3 = Moderately skilled, can complete job with limited supervision**

**2 = Limited skill, requires instruction and close supervision.**

**1 = Exposed to the concept, but no hands on experience.**

**\* - Identifies Mandatory Level One Competencies**

**Platemaking Procedures****Score**

* 1. Determine exposure time for an offset plate	*3	2	1
* 2. Prepare offset plates	*3	2	1
* 3. Develop screen tints/halftones on metal offset plate	*3	2	1
* 4. Correct offset plate errors in the image and non-image areas	*3	2	1
* 5. Preserve offset plates	*3	2	1
6. Operate and maintain plating processor	3	2	1
7. Demonstrate step-and-repeat plate registration using cut-outs and pin registration	3	2	1
8. Explain computer-to-plate/direct imaging technology	3	2	1

**Safety**

* 9. Follows safety procedures during all press operations.	*3	2	1
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**Duplicator and Sheetfed Press Operation**

*10. Prepare offset duplicator/press	*3	2	1
*11. Operate offset duplicator/press	*3	2	1
*12. Perform necessary duplicator/press cleaning	*3	2	1
13. Perform necessary duplicator/press maintenance	3	2	1
14. Demonstrate understanding of paper grades and classification	3	2	1
15. Demonstrate understanding of mixing inks, varnishes & coatings	3	2	1
16. Operate paper cutter to cut and trim various types of paper	3	2	1

**Web Press Operations (Heatset and Coldset/Non-heat)**

*17. Prepare web press, makeready	*3	2	1
*18. Demonstrate/understand the operation of the web press	*3	2	1

**Web Press Operations (Heatset and Coldset/Non-heat) continued**

**Score**

*19. Understand/demonstrate trouble shooting/quality control	*3	2	1
20. Perform press cleaning/maintenance	3	2	1
21. Demonstrate/understand paper grades & classifications	3	2	1
22. Demonstrate understanding of mixing inks, varnishes & coatings	3	2	1

**Press Layout and Imposition**

*23. Print single-color metal plate jobs	*3	2	1
24. Print sheet-wise (work and back) jobs	3	2	1
25. Print work-and-turn jobs	3	2	1
26. Print work-and-tumble jobs	3	2	1
*27. Print envelopes	*3	2	1
28. Print carbonless paper jobs	3	2	1
29. Print single-sided multi-colored jobs	3	2	1
30. Print multi-color jobs using second color head	3	2	1

**Proofing**

*31. Understand application of various proofs on press	*3	2	1
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**Total # of items completed with a level 1 or higher rating \_\_\_\_ (31 required)**

**Total # of items completed with a level 2 or higher rating \_\_\_\_ (24 required)**

**\*\*Item #9 must be completed with a level 3 rating\*\***

**\*\*Level One Scoring\*\***

**Total # of \* items completed with a level 1 or higher rating \_\_\_\_ (15 required)**

**Total # of \* items completed with a level 2 or higher rating \_\_\_\_ (11 required)**

**\*\*Item #9 must be completed with a level 3 rating\*\***

**Comments:** \_\_\_\_\_

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\_\_\_\_\_

# Image Transfer – Screen

Elective

## RATING

**3 = Moderately skilled, can complete job with limited supervision**

**2 = Limited skill, requires instruction and close supervision.**

**1 = Exposed to the concept, but no hands on experience.**

**\* - Identifies Mandatory Level One Competencies**

<b>Platemaking and Proofing</b>	<u>Score</u>		
1. Differentiate printed copy	3	2	1
2. Interpret work orders	3	2	1
3. Use screen printing tools	3	2	1
4. Construct screen frames	3	2	1
5. Prepare photodirect stencils	3	2	1
6. Prepare hand-cut aqua film screens	3	2	1
7. Prepare indirect photo stencils	3	2	1
8. Calculate mathematical proportions for measurements and ink formulations	3	2	1
9. Follow safety procedures in all screen printing operations	3	2	1
10. Analyze screen printing presses and components	3	2	1
11. Operate press and assess copy quality	3	2	1
12. Perform in-process production clean-up	3	2	1
13. Inspect product for defects using quality control standards	3	2	1
14. Print direct photo stencil single-color designs	3	2	1
15. Print direct photo stencil multi-color designs	3	2	1
16. Print indirect photo stencil single color jobs	3	2	1
17. Print indirect photo stencil multi-color jobs	3	2	1

**Total # of items completed with a level 1 or higher rating \_\_\_\_\_ (17 required)**

**Total # of items completed with a level 2 or higher rating \_\_\_\_\_ (15 required)**

**\*\*Item #9 must be completed with a level 3 rating\*\***

**\*\*Level One Scoring\*\***

**Total # of items completed with a level 1 or higher rating \_\_\_\_\_ (17 required)**

**Total # of items completed with a level 2 or higher rating \_\_\_\_\_ (10 required)**

**\*\*Item #9 must be completed with a level 3 rating\*\***

**Comments:** \_\_\_\_\_

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