

# OFFSET LITHOGRAPHIC PRESS OPERATOR

## APPENDIX A

O\*NET CODE 51-5023.00

This training outline is a minimum standard for Work Processes and Related Instruction. Changes in technology and regulations may result in the need for additional on-the-job or classroom training.

### WORK PROCESSES

	<b>Approximate Hours</b>
<b>A. Safety</b>	<b>200</b>
1. Familiarizing self with all trade related MSDS.	
2. Demonstrating proper safety precautions in handling, using, storing, and disposing of trade-related toxic chemicals.	
<b>B. Paper and Paper Handling</b>	<b>300</b>
1. Receiving paper, checking invoices, checking for damage in transit and store (if applicable).	
2. Handling paper without damaging, spilling, or shifting its load in stock.	
3. Counting paper (inventory).	
4. Identifying paper weights, types, and grain.	
<b>C. Planning/Processing Job Orders</b>	<b>400</b>
1. Examining job orders; verifying quantity to be printed, stock specifications, colors, special printing instructions.	
2. Planning job; obtaining required materials.	
3. Estimating job costs (e.g., space and utilities, labor and supplies, web vs. sheet-fed), if applicable.	
4. Computing customers' cost (planning, scheduling), if applicable.	
5. Comparing estimates with actual production costs, if applicable.	

## **D. Preparing Press**

**3000**

1. Identifying the major parts and systems of an actual offset printing unit.
2. Properly using all safety devices.
3. Making ready dampening system.
4. Measuring and mixing dampening fountain solution.
5. Maintaining pH/conductivity in fountain solution.
6. Changing and/or adjusting feeder and delivery for different sheets; setting guides accordingly. Preparing machine for double sheets.
7. Airing, jogging, conditioning paper.
8. Loading stock into press feeder.
9. Mounting plate on press.
10. Adjusting impression to caliper of paper.
11. Inspecting and packing blanket and plate cylinders.
12. Putting dampening fountain solution in press.
13. Changing dampening roller covers.
14. Setting dampening form rollers.
15. Mixing ink; inking up press.
16. Cleaning protective gum coating off metal plate with water.
17. Squaring image up on paper.
18. Adjusting ink fountain screws and maintaining color.
19. Registering printing images to each other.
20. Setting ink form rollers and vibrator roller to appropriate pressure.
21. Using reflection densitometer to measure ink density.
22. Wiping off particles of dust or dried ink (hickies) from plate; observing all safety precautions. Desensitizing metal plate or applying water to polymer plate.
23. Perforating and scoring on press, if applicable.

## **E. Operating Press**

**3000**

1. Starting press; adjusting feed and tension controls.
2. Examining printed copy for ink density, position on paper and registration.
3. Running solid color.

4. Running screens/halftones.
5. Running multi-color work using PMS colors.
6. Running process color jobs.
7. Printing single color job on carbonless paper.
8. Making adjustments to press throughout production run to maintain specific registration and color density.
9. Adjusting feeder and delivery mechanisms.
10. Adjusting temperatures in drying chamber if press has one.
11. Correcting paper jams or tears efficiently to minimize downtime.
12. Offset Lithographic Press Operator – Continued  
Approximate Hours
13. Operating Press – Continued
14. Monitoring printing process on control panel or computer monitor (if available); adjusting press electronically.
15. Unloading printed materials.
16. Setting gauge for spray powder.
17. Removing plate and gum, if necessary.

**F. Cleaning, Maintaining, Repairing Press 500**

1. Implementing look-out/tag-out procedures.
2. Washing press and ink rollers.
3. Removing, cleaning, storing dampening systems.
4. Identifying and repairing minor mechanical malfunctions.
5. Lubricating press.
6. Performing preventive maintenance on press.

**G. Packaging and Preparing for Mailing (if applicable)\* 200**

1. Performing heat-shrink wrapping.
2. Boxing completed job.
3. Banding packages.
4. Affixing address labels to package.
5. Weighing letters or packages on postal scale to determine mailing costs.
6. Sorting addresses for product labeling.
7. Preparing mailings for postal delivery.

**H. Interpersonal Relations (Including Customer Service, if Applicable) 200**

1. Demonstrating etiquette and courtesy.
2. Communicating effectively in both oral and written modes.
3. Demonstrating adherence to a code of professional ethics.
4. Maintaining a good professional appearance.

**I. Supervision (if applicable) \* 200**

1. Communicating effectively in both oral and written modes.
2. Assigning work to others.
3. Monitoring work of others.
4. Evaluating work of others.
5. Following proper disciplinary procedures, as required.
6. Demonstrating team leadership skills.

**Approximate Total Hours 8,000**

\*If this Work Processes is not applicable, the hours should be applied to further mastery of the other required Work Processes.

Much of the material used in this Appendix A and Appendix B was taken from the national skill standards of the National Council for Skill Standards in Graphic Communications. We gratefully acknowledge the permission of this organization to use their materials.

Some additional materials were taken from the U.S. Department of Labor's Occupational Outlook Handbook, 2000-01 edition.

Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to <https://dol.ny.gov/public-work-and-prevailing-wage>.

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## APPENDIX B

### RELATED INSTRUCTION

#### **Safety**

1. Basic Shop Safety
  - a. Basic Machine Safety
  - b. Lock-Out/Tag-Out Procedures
  - c. Using Personal Protective Equipment
  - d. Safe Handling, Use, Storage and Disposal of All Trade-Related Chemicals; Familiarization with MSDS
  - e. Local, State and Federal Guidelines Affecting the Printing Industry
  - f. First Aid (minimum 6.5 hours every 3 years)
  - g. Sexual Harassment Prevention Training – must comply with section 201-g of the Labor Law

#### **Mathematics**

1. Basic Arithmetic
2. Trade Math (including computing percentages, weights and measures; calculating amounts of ink and paper needed to do a job)

#### **Trade Theory and Science**

1. Introduction to the Principles of Mechanics
2. Color Theory
3. Electronics
4. Chemistry
5. Physics
6. Materials of the Trade (Inks and Papers)
7. Introduction to the Offset Lithographic Press
8. Tools of the Trade

#### **Business Skills**

1. Oral and Written Communication Skills
2. Working as Part of a Team
3. Time Management Skills

4. Customer Service, if applicable

**Industrial and Labor Relations (20 hours)**

1. History and Background (6 hours, 1st year)
2. Current Laws and Practices (14 hours, 2nd year)

**Other Related Courses as Necessary**

A minimum of 144 hours of Related Instruction are required for each Apprentice for each year.

Appendix B topics are approved by New York State Education Department.