PRESS OPERATIONS I  
Course Syllabus

Course Number:  PRNT 1296  
OHLAP Credit:  No  
OCAS Code:  None  
Course Length:  165 Hours  
Career Cluster:  Arts, A/V Technology & Communications  
Career Pathway:  Printing Technology  
Career Major(s):  Print Production

Pre-requisite(s):  
The student will be taught equipment and chemical safety procedures for setup and operation of an operating press. Maintenance and troubleshooting procedures will also be covered.

Textbooks:  
The GATF Sheetfed Offset Training Program by GATF Staff, GATF Press Pittsburgh (1998)  
Printing in a Digital World by David Bergsland, Delmar, Thomson Learning (1997)  

Course Objectives:  
A. Complete an Introduction to Basic Press Operations.  
1. Read and interpret production information from job ticket/jacket.  
2. Identify safety considerations for platemaking.  
3. Practice safe work habits in platemaking operations.  
4. Identify basic parts of the platemaker.  
5. Identify plate materials and plate types.  
6. Identify and explain the difference between positive and negative working plates.  
7. Identify platemaking procedures.  
8. Identify plate processing methods.  
9. Make additions, deletions, and repairs to an offset plate.  
10. Identify safety considerations for press operations.  
11. Practice safe work habits in press operations.  
12. Identify basic parts and systems of a press.  
13. Identify basic press operation procedures.  
14. Identify basic paper types and sizes.  
15. Determine grain direction of paper.  
16. Handle and jog paper stock (wire/felt, watermarks, carbonless sequence).  
17. Identify paper weight, coating, and sizes.  
18. Identify paper problems that can occur prior to running on the press (i.e., tight edges and wavy paper).  

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19. Identify offset ink types and uses.²
20. Identify ink additives.²
21. Identify ink problems.²
22. Describe a procedure to set up, mix, and test ink for printing using ink color chart for mixing requirements.²
23. Identify fountain solutions and additives.²
24. Identify mixed fountain solution testing materials, equipment, and procedures.²
25. Mix fountain solutions using appropriate ratios.²
26. Perform make-ready steps for paper: sheet size, impression cylinder, pressure, etc.²
27. Perform makeready for the inking system.²
28. Perform makeready of the dampening system.²
29. Print a single-color, one-sided job using a metal plate.²
30. Print a single-color job using photo direct and/or electrostatic masters.²
31. Print a single-color, 2-sided job.²
32. Print a single-color job on a carbonless stock.²
33. Print a single-color job on envelopes.²
34. Print a single-color job on heavy stock.²
35. Print a single-color, 2-sided job using work and tumble.²
36. Print a single-color, 2-sided job using work and turn.²
37. Print a two-color job without register marks.²
38. Print a two-color job with register marks.²
39. Print a two-color job with color bars.²
40. Print a two-color, 2-sided job.²

B. Complete an Introduction to Basic Press Maintenance and Troubleshooting.
   1. Perform a major press cleanup and roller treatment (deglazing).²
   2. Make needed pressure settings on a press.²
   3. Install and set a blanket.²
   4. Demonstrate proper washup techniques for inking system, dampening system, and cylinders.²
   5. Evaluate print quality and make needed adjustments to improve a printed piece.²
   6. Print close register color work.²
   7. Print heavy solid work making needed adjustments to improve quality.²
   8. Observe the press operation of a commercial printer.²

¹ODCTE objective
²Print ED competencies
All unmarked objectives are TTC instructor developed.

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and shop practice and performance.
   2. Each course must be passed with seventy (70%) percent or better.
   3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.
**PRESS OPERATIONS I**

<table>
<thead>
<tr>
<th>Description of Classroom, Laboratories, and Equipment:</th>
<th>Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.</th>
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</thead>
<tbody>
<tr>
<td>Available Certifications/ College Credit</td>
<td>The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.</td>
</tr>
<tr>
<td>College Credit Eligibility:</td>
<td>The student must maintain a grade point average of 2.0 or better.</td>
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