Course Number: PRNT-0199
OHLAP Credit: No
OCAS Code: None
Course Length: 120 Hours
Career Cluster: Arts, A/V Technology & Communications
Career Pathway: Printing Technology
Career Major(s): Print Production

Pre-requisite(s): This course is an extension of the Graphics and Imaging course and builds on the concepts, knowledge, and skills utilized in Graphics and Imaging. Students learn advanced reproduction of graphic images. The various methods of graphic imaging include screen process, raised lettering, gravure, engraving, and the largest method - offset. Students will produce assignments reflecting knowledge of basic press fundamentals of ink/water balance, color management and preventive maintenance while operating a variety of presses.

Textbooks:
Printing in a Digital World by David Bergsland, Delmar Thomson Learning (1997)

Course Objectives:
A. Complete Administrative Requirements for Enrollment.
   1. Complete forms pertaining to enrollment.
   2. Discuss District and school policies and procedures.
B. Participate in Career and Technology Student Organizations (CTSO).
   1. Discuss the purpose of a CTSO organization.
   2. Form a CTSO club.
   3. List characteristics and responsibilities of leaders and effective group members.
   4. Participate in CTSO activities/meetings.
   5. Discuss citizenship.
C. Research the Major Occupations in the Printing Industry.
   1. Define the role of graphics in the free enterprise system.¹
   2. Identify print markets and types of print businesses.¹
   3. List printing’s ranking among other industries.¹
   4. Identify the major occupations in the graphic arts and understand the basic training needed for each.¹
   5. List the major responsibilities of each occupation.¹
   6. Identify basic salary/wages expectation ranges for local area.¹
D. Identify and Describe the Major Printing Processes.
   1. List the advantages and disadvantages of each major process.¹
   2. Identify the products produced by each major process.¹
E. Explain the Printing Business and Production Flow.
   1. List in order the business flow of printing from initial concept to final product.¹
2. List in order the technical production flow from idea to finished product.¹
3. Identify and describe basic printing equipment.¹
4. Read and interpret production information from job ticket/jacket.¹

F. Demonstrate Safety and First Aid Procedures Related to Printing.
1. Identify location(s) of fire safety equipment.¹
2. Describe proper use of fire safety equipment.¹
3. List safety rules involving flammable liquids.¹
4. List the steps to be taken in case of injury in the lab.¹
5. Identify location(s) of first aid kit(s) and eye wash station(s).¹
6. Identify parts and terms of (MSDS).
7. Read and interpret Material Safety Data Sheets (MSDS).¹
8. Identify protective safety equipment where needed (gloves, goggles, ear plugs).¹
9. Follow proper safety procedures when operating equipment.¹
10. Follow approved shop dress code for safe operation including necessary personal safety equipment.¹
11. Pass general lab safety test.¹
12. Use approved methods to dispose of waste materials.¹
13. Read, interpret, and follow instructions on warning labels.¹
14. Demonstrate common sense when working with others.¹
15. Demonstrate a working knowledge of the safety color code.¹

G. Perform Basic Math Skills.
1. Solve addition of whole number problems-two and three digits.¹
2. Solve addition of fraction problems.¹
3. Solve addition of decimal problems-two and three digits.¹
4. Solve subtraction of whole number problems-two and three digits.¹
5. Solve subtraction of fraction problems.¹
6. Solve subtraction of decimal problems-two and three digits.¹
7. Solve multiplication of whole numbers-two and three digits.¹
8. Solve multiplication of decimal problems-two and three digits.¹
9. Solve division of whole number problems-two and three digits.¹
10. Solve division of decimal problems-two and three digits.¹
11. Solve decimals to percent conversion problems.¹
12. Solve percent to decimal conversion problems.¹
13. Solve basic ratio and proportion problems.¹
14. Solve basic linear measurement problems.¹
15. Solve basic type calculation problems.¹
16. Solve basic liquid measurement problems.¹
17. Solve basic paper cutting calculations.¹
18. Solve inches to points conversion problems.¹
19. Solve points and picas to inches conversion problems.¹
20. Solve cost calculating problems.¹

H. Demonstrate Job Application and Interpersonal Skills.
1. Demonstrate proper work ethic/habits.¹
2. Demonstrate how to locate job listings through a variety of sources (Internet, associations, newspapers, agencies, etc.).¹
3. Read and comprehend want ads.¹
4. Write a personal resume.¹
5. Write a cover letter for obtaining a printing job.¹
6. Read, comprehend, and complete an employment application form.¹
7. Practice job interview skills and appearance.¹
8. Complete a telephone interview for a printing job.¹
9. Write a follow-up letter.¹
10. Make a follow-up telephone call.¹
11. Evaluate benefit package for employment.¹
12. Compare job opportunities.¹
13. Observe a commercial printing operation.¹

¹Print 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%.

Description of Classroom, Laboratories, and Equipment:
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.

Available Certifications/College Credit:
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.

College Credit Eligibility:
The student must maintain a grade point average of 2.0 or better.