

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

X Transfer Course X A.A. Degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: GC 180 Digital Prepress and Press I

UNIT VALUE: 3.0 units

MINIMUM NUMBER OF SEMESTER HOURS: 96 hours

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills

ENTRANCE REQUIREMENTS

PREREQUISITE: None

COREQUISITE: None

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

Practical applications of electronic prepress and introduction to offset press operation. The theory and practical applications of conventional and digital prepress including job layout, page impositions, templates and press signatures, plus small format press operation to include control and setup of feeder and delivery units, press controls, direct to plate technology, ink and chemistry as related to the offset press.

SPECIFIC COURSE OBJECTIVES:

The successful student will be able to:

1. identify and apply needed prepress terminology.
2. identify and apply needed computer terminology.
3. identify and apply needed press terminology.
4. identify and use digital files.
5. perform needed imposition layouts.
6. identify five systems of the offset press.
7. identify and analyze output of digital plates.
8. analyze and solve image control problems.
9. analyze and apply job related instructions.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Safety Orientation
 - A. Equipment safety
 - B. Computer safety
 - C. Fire safety
 - D. Material safety data sheets
 - E. Material identification system/handling
 - F. Chemical handling
- II. Terminology
 - A. Computer terminology
 - B. Basic prepress terminology
 - C. Press terminology
- III. Computer Prepress
 - A. Digital files
 - B. Software application
 - C. Set up basic job
 - D. Templates
 - E. Imposition
- IV. Five Systems of an Offset Press
 - A. Feed systems
 - 1. direct entry
 - 2. register board
 - B. Delivery system
 - 1. types of delivery systems
 - 2. delivery systems fault finding
 - C. Dampening Systems
 - 1. full integrated system preparation and operation
 - 2. fountain solutions
 - 3. dampening chemistry
 - D. Cylinder Systems
 - 1. Plate
 - 2. Blanket
 - 3. Impression
 - E. Inking Systems
 - 1. identify components of inking system
 - 2. ink system preparation
 - 3. operation of the inking system
- V. Press Set-up
 - A. Reading job specifications
 - B. Make-ready procedures/requirements
 - C. Feed/delivery
 - D. Image registration/sheet control
 - E. Print quality
 - F. Press sheet approval
 - G. Quality control devices
- VI. Press Operation
 - A. Control of image position
 - B. Control of color on press
 - C. Correcting press problems

- D. Ink and water balance
- VII. Image Carriers
 - A. Types of image carriers
 - B. Plate mounting/removal
 - C. Plate problems
 - D. Plate chemistry
 - E. Typhoon plates
 - F. Metal plates
- VIII. Ink
 - A. Types of Ink
 - B. Ink mixing
 - C. Ink problems
- iX. Press Maintenance
 - A. Lubrication
 - B. Pressure adjustments
 - C. Maintenance programs
- X. Wash-Up
 - A. Clean up devices
 - B. Color change
 - C. Roller care
- XI. Color Work (single color press)
 - A. Spot color
 - B. Mechanical color

REQUIRED READING:

Multistate Academic and Vocational Curriculum Consortium, Inc., *Graphic Arts: The Press and Finishing Processes*, 4th edition, student edition, Multistate Academic and Vocational Curriculum Consortium, Inc., Oklahoma, 2000

SUGGESTED READING:

Quick Printing Magazine
Printing Impressions Magazine
In-Plant Magazine
PRE Magazine
Mac Week Magazine

REQUIRED WRITING:

Fifteen pages of unit worksheets for seven units of reading, matching, fill-in, short answer and paragraphs. One page on procedures for term project in mechanical color. Record keeping of written and mathematical specifications on job tickets and maintaining a job log of completed production work, one page per job.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

Students are required to read text, study lecture/lab notes, research and complete required press assignments.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

DISTANCE LEARNING:

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply:

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

- 30% Production Work
- 20% Proficiency Test
- 30% Term Project
- 20% Written Worksheets

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes No Number of times course may be taken for credit: 4

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable: 58161 (c)(2)(A)

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SIGNATURES ON FILE