

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 174 Commercial Screen Printing

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:

Commercial screen printing applications. Preparation of mechanicals using close registration and printing on standard and unusual surfaces. Color, mechanical, process and quality control standards in screen printing.

SPECIFIC COURSE OBJECTIVES:

Students will be able to demonstrate proficiency in the following:

1. Safe use of chemistry
2. Multi-color copy preparation
3. Halftone reproduction
4. Electronic scanning for screen printing
5. Duotone reproduction for screen printing
6. Mechanical color screening
7. Basic process color
8. Multi-color registration
9. Basic use of semi-automatic press
10. Select appropriate curing methods
11. Identify substrates

12. Select compatible ink for substrates
13. Cost estimating for screen printing

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Safety
 - A. Chemicals
 - B. Solvents
 - C. Machines
- II. Multi-color Copy Preparation
 - A. Key line art
 - B. Spot color
 - C. Overlays
 - D. Spreads and shrinks
 - E. computer copy preparation
 - F. Type selection for screening
- III. Continuous Tone Copy
 - A. Screen ruling
 - B. Dot shape
 - C. Mesh count
 - D. Substrates and rulings
 - E. Specialty screens
- IV. Electronic scanning (Monotonal)
 - A. Screen ruling
 - B. Dot shape
 - C. Special effects
- V. Continuous Tone Copy (Doutones)
 - A. Duotone range
 - B. Duotone color
 - C. Special effects
- VI. Mechanical Color
 - A. Screen tints
 - B. Process colors
 - C. Overlays
 - D. Computer applications
- VII. Process Color
 - A. Separation characteristics
 - B. Line rulings
 - C. Color balance
 - D. Mesh angle and color
 - E. Ink classification
- VIII. Matching Colors
 - A. Color systems
 - B. Compatible bases
 - C. Ink modifiers
 - D. Pretesting
 - E. Ink classifications
- IX. Multi-color Registration
 - A. Guides
 - B. Pin system
 - C. Mylar

- D. Vacuum beds
- E. Manual printing
- X. Semi-automatic Press
 - A. Make ready
 - B. Squeegee set-up
 - C. Press run
- XI. Post Press
 - A. Curing
 - 1. infrared
 - 2. ultraviolet
 - 3. jet air
 - B. Substrate shrinkage
- XII. Estimating
 - A. Methods
 - B. Computer assisted

REQUIRED READING:

None

SUGGESTED READING:

Fresener, Pat. Encyclopedia of Garment Printing.
Screen Printing Magazine.
Impressions Magazine.

REQUIRED WRITING:

Technical report on technology relating to textile imaging.

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.

Five hours of laboratory and copy preparation each week.

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 X

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):

A	100 - 90	60%	Assignments/Projects
B	89 - 80	10%	Report
C	79 - 70	20%	Test
D	69 - 60	10%	Lab/Attendance
F	59 - Below		

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

Yes X 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 FILES: