

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 172 / R GC 172 Textile 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:

Theory and applications of screen printing for textile use. Copy preparation for multicolor reproduction, color matching, ink selection, and mesh and stencils for material compatibility.

SPECIFIC COURSE OBJECTIVES:

The successful student will be able to:

1. identify compatible systems for textile applications.
2. demonstrate ability to prepare multicolor art for screen printing.
3. demonstrate ability to print on three types of fabrics.
4. identify and apply principles of color matching system.
5. identify and apply principles of ink modifiers.
6. demonstrate ability to Print on dark, light, porous and non-porous fabrics.
7. demonstrate ability to set up and register wet on wet printing machine.
8. demonstrate knowledge of three curing procedures.
9. identify garment, quality and fabric components.
10. demonstrate knowledge of six trouble shooting methods.
11. apply principles and use three quality control devices.
12. apply principles and ability to use advanced camera techniques.
13. apply principles and ability to use computer for image production and reproduction.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Safety Procedures
 - A. Equipment
 - B. Chemicals
- II. Screen Fabrics for Textile
 - A. Mesh
 - B. Tension
 - C. Color
- III. Frames/Squeegees
 - A. Types
 - B. Selection for applications
- IV. Preparing Multicolor Art
 - A. Fine line
 - B. Spreads and shrinks
 - C. Fabric and ink influence
- V. Computer Use
 - A. Overlays
 - B. Fills patterns
 - C. Sizing output
 - D. Image modification
 - E. Image repetition
- VI. Stencil Systems/Exposure
 - A. Direct emulsions
 - B. Coating
 - C. Exposure systems
 - D. Pre-registration
 - E. Quality Control
- VII. Textile Inks
 - A. Plastisols
 - B. Waterbase
 - C. Textile dyes
 - D. Puff inks
 - E. Heat transfer
 - F. Ink viscosity
 - G. Color matching
 - H. Ink modifiers
- VIII. Curing/Drying
 - A. Use of dryers
 - B. Production rates
 - C. Infra-red
 - D. Jet air
 - E. Temperature determination
 - F. Ultra violet
 - G. Flash curing
- IX. Printing Theory
 - A. Registration
 - B. Surface
 - C. Hold down systems

- D. Print placement
- E. Machine adjustments
- X. Multicolor Imaging
 - A. Color sequence
 - B. Detail multicolor
 - C. Mechanical color
 - D. Process color
 - E. Dark fabric
- XI. Fabrics
 - A. Cotton
 - B. Blends
 - C. Polyester
 - D. Nylon
 - E. Special services
 - F. Towels

REQUIRED READING:

None

SUGGESTED READING:

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

REQUIRED WRITING:

One page 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.

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). These outside assignments consist of: reading text, studying lecture and lab notes and solving layout problems.

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):

100 - 90	A	60%	Term Project
89 - 80	B	10%	Report
79 - 70	C	20%	Exam
69 - 60	D	10%	Assignments
59 - Below	F		

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

Yes X No ____ Number of times course may be taken for credit: 3

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