

GRC 18 Graphic Production Methods 1

3 units, 2 lecture 3 lab

Production methods of graphic communications systems with emphasis on printed material. Projects explore the limitations and considerations of software application programs for output of images and final reproduction with the printing process. Students will generate and execute printed materials.

- A. Safety
 - 1. Departmental concerns
 - 2. Electrical equipment
 - 3. Power equipment
 - 4. Work area and floor space
 - 5. Specific equipment hazards
 - 6. Materials, supplies, chemicals
 - 7. Fire hazards
 - 8. Clothing
 - 9. Clean up
 - 10. First Aide
 - 11. MSDS
 - 12. Safety test
- B. Camera Ready Art and Image Preparation
 - 1. Overview of the design/production process
 - 2. Image requirements for printing production
 - 3. Types of imposition
- C. Film images
 - 1. Lith film
 - 2. Duplicating/contact film
 - 3. Line negatives
 - 4. Halftones
 - 5. Tint screens
 - 6. Process color vs. spot color
- D. Darkroom
 - 1. Contact vacuum frame
 - 2. Vertical and horizontal copy camera
 - 3. Image setters
 - 4. Darkroom practices
 - 5. Automatic film processing
- E.. Register
 - 1. "No" register
 - 2. Loose
 - 3. Lap or trapped
 - 4. Hairline or butt
 - 5. Pin register technique
- F. Spread and Choke Methods of Trapping Color
- G. Masking Methods
 - 1. Emulsion and image orientation
 - 2. Goldenrod masking paper methods
 - a. emulsion up
 - b. emulsion down
 - 3. Masking films
 - 4. Clear base acetate
 - 5. Vinyl
- H. Imposition methods
 - 1. Sheetwise

2. Work and turn
3. Work and tumble
4. Step and repeat

I. Proofing

1. Velox
2. Dylux or blueline
3. Color key
4. NAPS

J. Platemaking

K. Offset papers

1. Paper drying and conditioning
2. Weight and size of paper
3. Determining paper cuts
4. Safe operation of paper knife
5. Press feeders
 - a. web
 - b. stream
 - c. vacuum
 - d. associated problems

L. Offset duplicator design

M. Fountain Solution

1. Ph
2. Alcohol additives, substitutes
3. Etch and gum
4. Distilled water
- 5 Conductivity

N. Dampeners

1. Integrated systems
2. Segregated systems
3. Molleton covers
4. Sleeves
5. Bare back rollers
6. Dampener roller care

O. Ink roller care and maintenance

P. Blankets

1. Selection
2. Care and maintenance
3. Replacement

Q. Camera direct plates

R. Operating offset duplicators

1. Set up
2. Image position
3. Printing
4. Adjusting
5. Cleaning/maintaining