

# Communications

½ Credit  
1 Semester

**Text:** Communication Systems - Johnson: Goodheart-Wilcox 2000

**Prerequisites:** None

## Course Description:

This course is an overall preview of present-day communication systems and how these systems affect our lives. The course consists of the study of broadcasting, computer imaging, desktop publishing, digital photography, engraving, entrepreneurship, graphic arts, graphic design, image transfer printing, offset printing, photography, and screen-printing. Activities include: video tape production, scanning and manipulating images, notepad design and printing, mass production projects, t-shirt designing and production, animation, digital photography, advertisement design, marketing a product through package design, and creating advertising specialty items.

This course is designed to meet the needs of the student who may be interested in a career in computer graphics, desktop publishing, photography, offset printing and management, advertising designer, web page developer, and many other related fields. This course is open to all students.

## Course Content:

- Introduction to Communication
- Technology and Communication
- The Communication System
- Design and Problem Solving
- Measurement Systems and Quality Assurance
- Communicating Ideas by Sketching
- Safety and Health Concerns
- Photography Basics
- Taking Pictures
- Color Photography
- Designing a Graphic Arts Product
- Image Generation and Assembly
- Desktop/Electronic Publishing
- Graphic Arts Photography
- Lithography
- Screen-printing
- Specialty Printing and Reprography
- Finishing Operations

- Computers
- Computer Software
- The Moving Image
- The Video Production

**Course Format:**

Course material is presented through a variety of methods. Presentations are made through lectures, discussions, demonstrations, written work, and lab assignments.

**Course Expectations:**

Students will be expected to read all required textbook chapters, complete all worksheets, tests, and lab assignments. Students will be expected to work safely while in the lab.

**Grades:**

Grades will be assessed for each unit of study. Homework assignments, daily lab work assignments, quizzes, individual projects, along with comprehensive unit tests will be recorded.

**Course Objectives:** The student will be able to  
Understand technical systems and their applications.

- List elements of the communication process
- Discuss the impact of modern communication technology on people's lives
- Trace the history of graphic communication
- Explain the printer's system of measurement
- Describe the processes of typesetting and proofreading
- Explain the operation of the process camera
- Explain the principles of offset printing
- Explain the major finishing operations
- Describe the various binding methods
- Explain screen process printing
- Explain the heat-transfer method used for producing a design
- Describe the process of taking and producing a photograph
- Identify the equipment used to process film
- Explain how electronic transmitting and receiving equipment works
- Describe how a computer system operates
- Describe how computers are used in the graphic communications field
- Explain applications of software in graphic communication

Be able to analyze and solve technical problems

- Identify common printing methods and describe the principles by which they work
- Use the various design principles to produce an effective design
- Identify the classifications of typefaces
- Complete a comprehensive layout
- Process an offset plate
- Operate an offset press
- Use a paper cutter

- Make a memo pad
- Produce a high-quality screen print
- Load and unload the film in a camera
- Adjust the camera correctly to obtain a high-quality exposure
- Use proper composition techniques to create more attractive and interesting pictures
- Properly care for negatives
- Produce a television script for commercials, news, feature stories, sports, and/or weather

Become familiar with a variety of technical and related occupations

- Identify and describe the different careers in the graphic communication industry
- Describe various careers related to photography

Be able to demonstrate cooperative work skills

- Use the equipment rotation schedule to complete various assignments
- Work with mass production group effectively
- Complete homework assignments on time
- Provide mentoring to fellow classmates when needed

Investigate and explore emerging technologies and technical occupations

- Explain the process used to produce an electronic mechanical
- Explain how a laser printer has changed the plate-making process
- Describe modern innovations in digital photography
- Explain how the computer has become a vital part of prepress operations

Be able to operate equipment and use materials in a proper, safe, and considerate manner

- Follow all operation and safety procedures for power equipment used in the graphics lab
- Conserve materials to keep lab costs low
- Safely use equipment and chemicals to process film