

# CLEMSON UNIVERSITY

College of Business & Behavioral Science  
Graphic Communications Department

## COURSE SYLLABUS

### Course Title

**GC 104 Graphic Communications I**, 4 cr. (2 hrs. lecture, 6 hrs. lab scheduled per week during semester)  
(3 hrs. lecture, 17 hrs. lab per week summer).

### Course Description

Emphasis on basic graphic arts industrial concepts, principles and practices, with laboratory applications in photography, layout and design, conventional and electronic copy preparation, reproduction photography, offset lithography, screen printing and finishing operations. Flexography, gravure, letterpress and specialty printing processes are also covered, along with environmental, health and safety concerns.

**Prerequisites:** None.

### Course Objectives

The primary objectives of this course are for the student to:

1. Discuss the importance of the graphic communications industry to individuals, corporations, the community, the nation and the world;
2. Identify work done by each of the major processes used by the graphic communications industry;
3. Perform operations in the areas of design, basic electronic pre-press operations, offset lithography, screen printing, continuous tone and reproduction photography, and binding and finishing;
4. Discuss the basic principles of cameras, films, and digital imaging systems and perform operations involving their use;
5. Rationally approach problems encountered in the graphic communications laboratory and arrive at logical solutions;
6. Identify applications of graphic arts and photography for leisure time activities;
7. Observe and discuss the impact of science and research on the modern graphic communications industry;
8. Converse with technical people of the printing, publishing, and packaging industries with an understanding of the fundamental elements of their occupations;
9. Develop positive social attitudes and habits in work conditions;
10. Develop a sound, broad base of knowledge and experience upon which to build, through advanced courses, a thorough understanding and ability in the field of graphic communications.
11. Recognize and discuss various environmental, health, and safety concerns involving the graphic arts industry.

### References

The required readings are intended to provide supplementary information to assist in the lectures, discussions, and assignments for this course. In this course, you will find examination questions are generated as much from lecture and discussion as from the text.

#### **Required Course Textbooks:** (Required books available in the bookstore)

- Prust, Z.A., *Graphic Communications, The Printed Image*. Tinley Park, IL. Goodheart-Willcox, 2003, Fourth Ed.
- *Pocket Pal*. International Paper, Inc., 2003, Twentieth Edition.

#### **Supplemental Resources:**

- Beach, Mark, *Graphically Speaking*. Manzanita, OR. Elkridge Publishing, 1992.
- Baig, Edward C., *Macs for Dummies*. Hoboken, NJ. Wiley Publishing., 2006. Ninth Edition.

### Distributed Competencies

As stated in the General Education section of the University Undergraduate Announcements, each degree program is responsible for integrating a plan that addresses specific distributed competencies and their implementation into the departmental curriculum. These competencies include points of: Ethical Judgment; Information Technology; and Reasoning, Critical Thinking, and Problem Solving. While each of these competencies is addressed throughout every course within the GC curriculum, it would not be practical to include all the related work in a student's ePortfolio as evidence of their accomplishment. Minimum evidence of meeting these specified competencies will be indicated on each course syllabus, tied to the course requirement (project, report, etc.) that must be posted in each student's ePortfolio for purposes of assessment to meet criteria for graduation.

## Major Units of Instruction

- A. History of the Printing Industry
- B. Printing Processes
  - 1. Offset
  - 2. Flexography
  - 3. Screen Printing
  - 4. Gravure
  - 5. Quick Printing
  - 6. Digital Printing
- C. Printing Production
  - 1. Printed Products
  - 2. Production Flow
  - 3. Safety
- D. Graphic Design
  - 1. Design Principles
  - 2. Typography
  - 3. Photography
  - 4. Line Art
- E. Posterization
- F. Halftones/Duotones
- G. Color
- H. Prepress
  - 1. Traditional
  - 2. Digital
    - a. Creation/Input
    - b. Assembly
    - c. Output
- I. Imaging Systems
  - 1. Continuous Tone Photography
  - 2. Reproduction Photography
    - a. Grayscale
    - b. Scaling
  - 3. Scanning and Digital Photography
    - a. Resolution
    - b. Image Optimization
    - c. Special Effects
- J. Paper and Other Substrates
- K. Ink
- L. Printing Presses
- M. Finishing Operations

## Lecture Assignments

There will be reading assignments for each lecture; you are expected to read the material before class of the date shown on the Lecture & Lab Schedule. The assignments for the lecture portion of the course will consist of the following:

**A. Homework Assignments:** To receive full credit, homework must be turned in on or before the announced due date shown on the schedule. Less than full credit (or NO credit) will be earned on homework turned in late. All written assignments must be submitted on smooth-edged paper (*no spiral-bound tear-outs*) appropriately fastened (i.e., stapled, and not in a folder) and properly *identified with your name, the course and lab section number* in the top right corner or in the space provided. **GenEd E-1: The Policies Statement & Safety Assignment will be retained by your instructor for inclusion in the student's ePortfolio.**

**B. Three Article Reviews:** During the semester you will select for review three periodical articles concerning recent developments in the graphic arts industry. Each review must fit on **ONE** typed, double-spaced page with *no cover sheet*. These must be submitted by email to the instructor. Graded article review will be returned to the student for the first article review. Specifications given for article reviews must be followed (see attached sheet). **GenEd R-1: The first, graded Article Review will be retained by the student for inclusion in the student's ePortfolio.**

### C. Exams, Lab Quizzes, Quizzes:

1. Exams will cover weekly readings as well as lectures, assignments and self-instructional programs (SIPS). These can only be made up in case of bona fide excuses (*must advise instructor in advance of absence*).
2. Lab Quizzes: After completion of lab activities A, B, C & D below, the appropriate lab quiz or report must be completed. Note lab quiz dates on schedule.
3. Lecture quizzes may be unannounced. These *may not be made up*.

**D. Industry Field Trip:** Students are required to attend a scheduled all-day field trip or a grade of "I" will be submitted. These will be scheduled once the semester is underway.

## Lab Assignments

All students must complete all assignments—A, B, C, D, E, & F—to receive a grade for the course. Any work turned in late will earn less than full credit (or NO credit). An incomplete or a grade of "I" will be submitted only in cases of documented emergency. Any other "I" grades are lowered one letter grade upon final submission. See "Grading" for further details. Thumbnails and rough layouts are required and must be approved and initialed by the instructor by the due date on the course calendar. Photography does not require thumbnails and a rough layout therefore, if a due date for thumbnails and rough layout is indicated in the course calendar these will be for the next project in your project track sequence.

**A. Image Capture, Scanning and Tone Control:** Use Assignment Sheet AS-1. Activities will be completed by the student per AS-1 requirements. The student will learn and implement the proper methods for image capture with an emphasis on scanners and continuous tone images. Understanding and selecting resolution, image size/dimensions, files size and image type/mode and purpose of scan will be primary learning objectives of this assignment. Stock images will be scanned, proofed and analyzed to complete this assignment.

**B. Textile Screen Printing:** Use Assignment Sheet AS-2. Design, prepare and produce a screen printed product utilizing 3 stencils and three colors of ink printed in exact register. Two colors must be touching and in exact register. Maximum image size of 8" X 10". **GenEd M-4: Create small images (2" x 3" @ 200 PPI maximum) of digital artwork and digital picture or scanned copy of completed project to be saved as EPS or TIF file format for use in Digital Portfolio (Project F). Record project reflections to be included in the ePortfolio.**

**C. Offset Lithography Duotone:** Use Assignment Sheet AS-3. A product with a duotone must be produced, proofed and printed along with line work, a spot color and screen tint using the offset lithography process. **Maximum size of duotone**

image is 5" X 7"; maximum press sheet 9" X 12". **GenEd M-4: Create small images (2" x 3" @ 200 PPI maximum) of digital artwork and a digital picture or scanned copy of the untrimmed press sheet and trimmed/completed project to be saved as EPS or TIF file format for use in Digital Portfolio (Project F). Record project reflections to be included in the ePortfolio.**

- D. Flexographic Label:** Use Assignment Sheet AS-4. A one-color design must be produced, proofed and printed by the flexographic printing method. Maximum size for the label design must fit to a dieline composed of a 1" x 2 7/8" round corner rectangle and must allow for at least 1/8" white space along each side of the dieline. **GenEd R-3: The flexography lab report sheets from this project will be retained by the student for inclusion in the student's ePortfolio (Project F). GenEd M-4: Create small images (2" x 3" @ 200 PPI maximum) of digital artwork and a digital picture or scanned copy of the photopolymer plate and the completed label project to be saved as EPS or TIF file format for use in Digital Portfolio (Project F). Record project reflections to be included in the ePortfolio.**
- E. Typesetting & Newsletter:** Use Assignment Sheet AS-5. This assignment is completed in two parts. The first is an exercise in the proper methods of setting, manipulating and altering text by using a page layout program to duplicate a layout using the correct commands, settings and keystrokes. The second portion of this assignment will be to design and prepare a newsletter using the Macintosh computer and a page layout program. The newsletter must meet all the requirements set forth in the assignment sheet. The total newsletter maximum size is **8 1/2" X 11"**.
- F. Digital Portfolio:** Use Assignment Sheet AS-6. The student will complete an **8 1/2" X 11"** layout in Adobe InDesign that shows examples of and reflections about their laboratory work in GC 104. The layout will saved as a PostScript file and distilled using Adobe Acrobat Distiller for the purpose of posting to the student's ePortfolio on Blackboard. **GenEd M-4 PDF files of the Policies Statement, Safety Assignment, One Graded Article Review, Flexography Lab Report, and Laboratory Work with reflections will be included in the student's ePortfolio.**

**Clean-Ups:** Each student must complete 10, 15-minute cleanups during the semester. In addition, each student must complete a one-hour cleanup during the days of final examinations. Each 15-minute clean up is worth 5 points and the final one-hour cleanup is worth 25 points for a total possible clean up grade of 100%. One percent of the students' final grade comes from participating in cleanups. These cleanups include general maintenance procedures essential to a smooth production environment. Failure to complete any cleanups will result in a maximum possible final grade for the course of 99%.

### Supplies:

**Tools Needed:** Students must obtain the required tools needed in the laboratory listed below. An asterisk denotes those tools required for lab. Other supplies are sometimes available from the lost and found. This is not a reliable resource so it is advisable to obtain your own supplies or to at least share supplies with a partner. *You must have safety glasses* by the third lab period or 5 points will be deducted from your first project grade.

Safety Glasses*	Ruler/Line Gauge (12")
Blue Nitrile Gloves	Triangle (30-60°)
Tool Box or container	Scissors (8" recommended)
Black Ultra-fine point Sharpie pen	Calculator
X-acto Knife or similar type cutting tool	Black ball point pen (no gel pens)

### Grading

- A. Grades for attendance, homework assignments, lab quizzes, lab projects, article reviews and exams are included in the final course grade. GC H104 enrollees must complete additional requirements as specified in the document, "GC H104 Requirements". The point breakdown for GC 104 students and GC H104 students are as follows:

GC 104 Students		GC H104 Students	
Attendance/Participation/Maintenance	= 2%	Attendance/Participation/Maintenance	= 2%
Six Homework Assignments	= 12%	Six Homework Assignments	= 12%
Four Lab Quizzes	= 9%	Four Lab Quizzes	= 10%
Six Lab Projects	= 36%	Honors Assignment/project	= 5%
Three Article Reviews	= 6%	Six Lab Projects	= 30%
Exam I & II	= 20%	Three Article Reviews	= 6%
Final Exam	= 15%	Exam I & II	= 20%
<b>Total</b>	<b>= 100%</b>	Final Exam	= 15%
		<b>Total</b>	<b>= 100%</b>

- B. Laboratory—All laboratory assignments must be completed to meet course requirements and to receive a final grade for the course. Each assignment is evaluated per the *GC 104 Lab Evaluation Sheet* when completed.
- C. Policy concerning Incompletes: Incompletes are normally given only in cases of documented emergency or if a field trip is missed. **An incomplete or a grade of "I" will be submitted only in cases of documented emergency. Any other "I"**

**grades are lowered one letter grade upon final submission. A grade of “I” will only be submitted at the discretion of the instructor. The student must have a cumulative grade of “C” or better up to that point and must have completed at least 90% of all coursework.**

- D. Departmental policy now requires you to earn a *C* or better in this course to enroll in any other course listing GC 104 as a pre-requisite. Students who change majors into Graphic Communications after one or more semesters at Clemson must have a 2.5 minimum cumulative grade-point ratio in courses taken at Clemson and must first have earned a *B* or better in G C 104.
- E. Due Dates: Due dates are listed in the class schedule you will receive. All late assignments will receive an overall 10% per day deduction and will not be accepted after one week late.

## **Attendance Policy**

Regular and punctual attendance at all lecture and lab sessions is required. Work in GC 104 proceeds at such an intense pace that regular attendance is necessary to complete the work and obtain maximum benefits. Regardless of an absence all assignments must be turned in on time or immediately following the excused absence or they will be graded as late. The following rules apply:

- A. Students will be permitted a total of only three unexcused absences from scheduled meetings (either lectures or labs).
- B. With a fourth unexcused absence, the student’s final grade will be lowered by one letter grade.
- C. With five (5) or more unexcused absences, the instructor reserves the right to drop the student from class.
- D. Excused absences are:
  - 1) Those with a written explanation or receipt signed by a physician or the Clemson University Health Center;
  - 2) Official University activities with a written excuse from the appropriate University official; and
  - 3) Family/personal emergencies with a written excuse or receipt from the Office of Student Affairs.
- E. Excuses are expected within one week of the absence(s). If there is any question as to the nature of an absence, the student should seek out the instructor prior to the absence. In any case, it is the student’s responsibility to advise the instructor, not the instructor’s responsibility to trace the status of an absence.
- F. Tardiness: Punctual arrival at lecture and lab sessions is required. Three documented occurrences of unexcused tardiness will be treated as ONE absence.
- G. Roll: It is the student’s responsibility to sign in at both lecture and lab sessions upon arrival and sign out from labs upon leaving. Failure to sign in will result in an absence being recorded, and leaving during a session without advising the instructor may, at the instructor’s judgment, be treated as an absence.
- H. Students desiring to withdraw from lecture and lab should see the instructor prior to terminating attendance.
- I. General: At lectures, in rare instances of an instructor’s tardiness, students should wait 15 minutes for the instructor. At the beginning of labs, after signing in, proceed after two minutes to begin lab work. If instructor is not present, at least one lab assistant will normally be present. Unannounced quizzes given in the lecture or laboratory session cannot be made up.

## **Students with Disabilities**

Appropriate accommodations will be made for students with disabilities that are documented by Student Disabilities Services. It is expected that students will follow the policies and procedures of Student Disabilities Services. Students must present a letter stating that the disability has been documented and requesting the specific accommodations during the first week of classes. Additionally, it is the responsibility of the student to give the professor one-week’s notice prior to each instance where an accommodation will be needed. (See <http://www.clemson.edu/asc/>).

## **Academic Integrity**

As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a “high seminary of learning.” Fundamental to this vision is a mutual commitment to truthfulness, honor and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.

## Article Reviews<sup>E2</sup>

The field of Graphic Communications is experiencing rapid technological changes and challenges. New materials and techniques, environmental concerns, computer applications, and the demand for “more-better-faster” make this an exciting and fast-paced industry. Throughout the semester you will select three periodical articles to review. Most periodicals concerned with the Graphic Arts industry are located on the sixth floor of the Cooper Library. The three articles may or may not be related, but should concern recent developments in the Graphic Arts industry. *Note that many advertisements are now published disguised as articles—these will not be accepted. Articles reviewed must have an author. No internet sources will be accepted.*

Present two to three paragraphs summarizing the article and a final paragraph of summation. You should not be rewriting the article, but presenting an overview of the content. Present “substance,” not “fluff.” Instructor reading the review must be able to glean the major points accurately and quickly. Be imaginative regarding possible relevance of article information. Draw conclusions/make predictions that are possible based on article. Brevity is necessary.

**SPECIFICATIONS:** Each review should comply with the specifications outlined below.

1. All reviews must fit on ONE (1) typed, 8 1/2" x 11" page, double-spaced (3 lines per vertical inch) with 1" margins on all sides, with no cover sheet. Type must be no smaller than 10 point and no larger than 12 point. Handwritten reviews will be rejected. “Times” font is required.
  2. Select an article **from a printed periodical dated August 2007 or more recently**. During the term, use at least 2 different periodicals (don’t get all from *Graphic Arts Monthly*). Only use one article per review—do not report on more than one article per review. **Internet sources will not be accepted, must be from a periodical in print.**
  3. Submit review by electronic attachment by email to the lecture instructor. Do not turn in the article or magazine. Subject line of email should read “Article Review 1, 2, or 3” depending on which one you are sending or review will not be graded. Article reviews are due by midnight on the day specified in the course calendar for full credit.
  4. Spelling, grammar, punctuation, spacing, format and neatness will influence the grade.  
Two points will be deducted per error.
  5. Use the proper bibliographical information, in the form shown in the example below.
  6. See the “Sample Article Review” on the following page for proper format and citation of source.
- A response email will be sent on all article reviews with a grade less than 90% noting errors for your review.

### SAMPLE OF PAGE HEADER

**Doe, John. “Current Trends in Flexography.”  
*Graphic Arts Monthly* August 2005: 72-75; 99.**

**Your Name  
GC 104 Lab Section #  
Instructor’s Name  
Date submitted  
Review # (1, 2, or 3)**

**GRADING:** Article reviews are worth 2% each toward the final course grade, but are graded on a scale of 0 to 100. Two points will be deducted per each spelling, grammar, punctuation, spacing, or format error. See below for other possible deductions. To receive full credit, article reviews must be submitted on the due dates shown on the class schedule. Article reviews are due by midnight on the due date by email submission. Reviews submitted late receive partial credit. ***Note the point deduction of 100% for improper or inadequate citation of source.*** See the following page for an “example” article review.

Please refer to: [http://owl.english.purdue.edu/handouts/research/r\\_mla.html](http://owl.english.purdue.edu/handouts/research/r_mla.html) or  
[http://owl.english.purdue.edu/handouts/research/r\\_apa.html](http://owl.english.purdue.edu/handouts/research/r_apa.html) for proper citation methods.

### **POSSIBLE DEDUCTIONS:**

Improper/Inadequate citation (or resubmit as late).....	(-100)	_____
Typed.....	(-10)	_____
Double-spaced (3/in.) .....	(-5)	_____
One page max. ....	(-5)	_____
Type size (10-12 pt.).....	(-5)	_____
1" Borders .....	(-5)	_____
Age of article .....	(-10)	_____
Sample page header followed.....	(-5)	_____
Errors .....	(-2 ea.)	_____
Predictions/Conclusions not made.....	(-10)	_____
On time (-10 per day%).....	TOTAL SCORE =	_____

\*\*\*\*\*  
**A grade of “0” will be recorded for lack of proper citation according to instructions/example. Please review this sheet and the following example prior to submitting your article review.**  
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Guthrie, J.T. "Psychology of Graphics."  
Flexo July 2011: 36-38.

This article discusses the consumer's perception of color and colors used in marketing. The colors that we see can be shaped and formed to affect the way a product is perceived by the consumer. The packager uses the consumers' perception of color to attract them to their product. The perception of color can also be affected by the other senses. These factors are used to produce good design (Guthrie 36).

This article also discusses how humans perceive color and shapes. This perception is different in every person and varies with age and can affect the way we perceive life and our experiences. We express these experiences through stories that involve the colors that we have seen (Guthrie 37).

The article closes by discussing how we use these perceptions to make our decisions. These perceptions can be linked to many factors including upbringing, imagination, life experiences, and both physical and mental health (Guthrie 38). This article pointed out many of the factors involving color and graphic design I believe must be considered when designing a package and its graphics for it to be successfully competitive in the marketplace. This article is a good introduction to a few of the key areas of successful marketing of a product.