DEPARTMENT OF GRAPHIC COMMUNICATIONS
COLLEGE OF BUSINESS • CLEMSON UNIVERSITY

Graphic Communications II • Spring 2018

Course Title: GC 2070-001 and GC2071-001 to 004
Graphic Communications II, 4 credits (2,6)
Prerequisite: GC 1010, GC 1020/1, GC1040/1
Lecture: Godfrey Hall, Room 201
Lab: Godfrey Hall, Room 101 Basic Lab Area

Instructor (Lecture and Lab): Dr. Charles T. Weiss • Associate Professor • Graphic Communications
G-01 Tillman Hall • Office phone: 864.656.3447 • e-mail: ctweiss@clemson.edu

Instructor (Lab): Jay Jacobs • Lecturer • Graphic Communications
G-01 Tillman Hall • Office phone: 864.656.3447 • e-mail: jacobs5@clemson.edu

Students should wait at least 10 minutes if the instructor is late for lecture or lab.

"When in doubt, don't" **~ Benjamin Franklin**

Course Description:

An intermediate course for the graphic communications and graphic arts specialist.

A continuation of GC1040 and GC1041, with emphasis on theory and problem solving as well as broadening skills in the areas of electronic layout file preparation, lithographic and screen printing presswork. Additional areas include basic electronic halftone theory, wide format technology and markets and basic methods for quality control, computer networking, computer operating systems and software.

Critical Thinking and This Course

Critical thinking and college courses typically happen at the junior and senior levels. Freshman and sophomore years are traditionally meant to teach the generalities and the basics, while upper level courses traditionally take this general knowledge and apply the knowledge in a critical manner to illustrate higher order thinking. This course is designed with the sophomore in mind. Critical thinking should not just happen as juniors and seniors, it should start as freshman and sophomores. This course has been designated as a seminar for Clemson Thinks[2].

Students enrolled in this course will apply critical thinking processes to course competencies. As part of the critical thinking process students will be exposed to the following five learning outcomes.

1. Students will be able to explore complex challenges
2. Students will be able to analyze multi-dimensional problems
3. Students will be able to extrapolate from one conceptual context to others
4. Students will be able to synthesize alternative solutions to multidimensional challenges
5. Students will be able to communicate effectively complex ideas

Course assignments and projects will be directly linked to these learning outcomes.

Specific Course Objectives: Upon completion of this course, the student will:

1. Produce a layout with clear specifications, using accepted industrial terms and symbols, with sufficient detail to enable another person to produce the job correctly without further verbal clarification.
2. Mix ink to match Pantone samples according to layout specifications.
3. Complete electronic original preparation, vector image creation methods, lithographic press equipment and finishing processes not experienced in prior courses to produce multi color line reproductions with solids and tint overlays via the lithographic process.
4. Reproduce tight register multi color line and halftone images for screen printing to layout specifications employing presses not used in prior courses
5. Select and use appropriate software to solve prepress problems, as evidenced by their completed lab work and lab reports.
6. Select and use appropriate test/measurement devices and methods to set standards for any photo sensitized or digital output material, as evidenced by exam questions and lab reports.
7. Identify and use some form of industrial process quality control, as evidenced by lab work and exam questions.
8. Establish proper workflows for the completion of projects and assignments.
9. Explore digital art reproduction methods. **(This project may change)**
10. Design and print a suitable design on a cylindrical surface by screen printing.

Evaluation

The point totals are listed below. Note that there is an academic component to the lab with lab quizzes on major assignments. Regardless of point total, a student cannot receive an A for the course without achieving a 75% or higher average on examinations, or a B without a 60% grade average on examinations.

The policy for the Graphic communications major, published in the undergraduate announcements states that to move to the next course in the Graphic Communications curriculum guide a student must make at least a C in the prerequisite course. GC 207 is a prerequisite for GC 4XX and all later courses.

Grading System - Labs

Laboratory work will be evaluated on the quality and accuracy of methods used to complete laboratory assignments and projects covering all objectives. Rubrics will be used to analyze and grade each assignment submitted.

Additionally, part of the laboratory grade will be based upon a technical notebook documenting any technical details of the assignments. No more than half credit can be earned on projects turned in after the due date listed on your Lab Track schedule.

A written lab report is required to be submitted to Canvas with all lab project assignments. Failure to submit your PDF report to Canvas will result in that project not receiving a grade.

Point Totals and Estimated Completion Time for Assignments (subject to change with notice)

Lab Assignments				
			# of Labs	**Points**
1		Initial Design for Cylinder Printing	.5	25
2		Rough Layout for Litho Printing	1.5	75
3		Initial Photo for Screen Printing	.5	25
4		Paper Cutting Exercise	.5	37
5		Photo Layout Approved for Screen Printing	.5	25
6		Color Separation Layout Inkjet Proofs	.5	40
7		Litho 2-Color Demo Print and Assignment	.5	50
8	Project	Litho printed 2 color (prep+print)	4	100
9	Project	Screen printed 4 color (prep+print)	9	150
10	Project	Screen printed cylindrical product	2	75
11	Project	Digital Printing Project	1	50
12	Quiz	Filters & Scanner exercise	.5	30
13	Quiz	Halftones calibration	.5	30
14	Quiz	Ink jet Calibration	.5	30
15	Quiz	Screen 4C Print	.5	30
16	Quiz	Litho 2C Print	.5	30
17		Clean ups; 5, 10-minute, 1, 30-minute		80
18		Due dates sheet		52
19		Technical Notebook – Written and Digital Formats		120
		Lab Total:		**1054**
Lecture Assignments				
1		Article Review #1 Color separation techniques or		75
2		Virtual tour-video report #1 on Screen printing		75
3		Virtual tour-video report #2 on Inkjet Technology		75
6		Exam #1		100
7		Exam #2		100
8		Exam #3		100
9		Exam #4 Final exam: partially cumulative		150
11		Participation (Lecture and Lab)		100
		Lecture Total:		**775**
			Total:	**1829**
		Additional projects may be added with notice		

List of Projects may change based upon flow of the lab and how the class progresses.

Project Evaluation Points

Grading scale=A=100 - 90; B= 89 - 80; C= 79 - 70; D= 69 - 60; F= 59 - 0

The weighting in Canvas gives percentage as if the percent was figured from total points in the course.

Keep in mind grades will not be rounded up beyond the norm. For instance, if you receive an 89.2 in the course your final grade will be a B; If you receive an 89.9 in the course your final grade will be rounded up to 90 and you will receive an A in the course.

Grades will be updated on Canvas as they are completed. Please note that your lecture grades will be determined by your lecture instructor, while your lab grades will be determined by your lab instructor.

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.”

This issue of integrity also applies to sign-in sheets and due date sheets. You may not sign-in for anybody else!

NOTE: although some assignments might seem to be group projects since 4 students are doing them at the same time, all students are expected to do their own original work.

Students with Disabilities

Appropriate accommodations will be made for students with disabilities that are documented by Disabilities Services. It is expected that students will follow the policies and procedures of Disabilities Services:
(see: http://www.clemson.edu/campus-life/campus-services/sds/students/doc-requirements.html)

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.

Note: The gaps in the address between disability and services and Student and Guide are underscores.

The Clemson University Title IX (Sexual Harassment) Statement:

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran’s status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972.

Attendance Policy:

Regular and punctual attendance at all lecture and lab sessions is expected. Work in GC 207 proceeds at such an intense pace that regular attendance is necessary to complete the work and obtain maximum benefits.

The following rules apply:

+++

1. Students will be allowed a total of only **3** unexcused absences from scheduled 207 meetings without penalty (either lectures or labs—an absence from any lecture is one absence; an absence from any lab is one absence).

2. On the **4th** unexcused absence participation grade will drop 15 points. .
3. On the **5th** unexcused absence your participation grade will drop an additional 30 points.
4. On the **6th** unexcused absence your participation grade will be lowered to a zero.
5. **Any additional absences will result in a full letter grade from your final calculated grade from the course. (One grade deduction for each absence after your 6th.) Please note you can fail the course from unexcused absences)**

++

Excused absences are:
Those with a written explanation or receipt signed by a physician or the Clemson University Health Center; official University activities with a written excuse from the appropriate University official; and family/personal emergencies with a written excuse or receipt from the Office of Student Affairs.
Excuses are expected within one week of the absence(s) and 3 days during the summer. 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. Note: An absence of any kind does not change due dates.

Inclement Weather:
If the University is cancelled due to inclement weather, lecture and/or lab will not be held. If you have a question about class meeting because of adverse weather please check the Blackboard site and/or e-mail the instructor.

Tardiness: Punctual arrival at lecture and lab sessions is required. Each three (3) documented occurrences of unexcused tardiness will be treated as ONE absence. Each absence documented from unexcused tardiness will be treated as any other absence. (Tardy = late; behind time; not on time.)

Roll: It is the student's responsibility to initial/sign the roll sheet at both lecture and lab sessions upon arrival. 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. *Also, if you miss a class (lecture or lab) and sign in for that missed class at a later date this will be a clear violation of the academic integrity agreement between you, your instructor, and Clemson University.*

General:

- Lectures will be held in Godfrey Hall, in rare instances of an instructor's tardiness, students should wait 10 minutes for the instructor. At the beginning of labs, after signing in, begin lab work.

- Unannounced quizzes may be given at times throughout the semester. These quizzes cannot made up if missed.

- **Printing presses will only be used when an assigned staff person is in the lab. Do not plan to do presswork at unscheduled times and starting with less than one and one-half (1 1/2) hours left in a lab session is prohibited without special permission.**

- *Students desiring to withdraw from lecture and lab should see the instructor prior to terminating attendance.*

  Safety: You are required to have safety glasses at all times in specified places. You are required to wear them in marked areas where hazardous chemicals are used. Shorts will not be permitted in these same areas. These are OSHA regulations!

- **You are required to wear closed-toe shoes, which can protect your toes and heels** from dropped or sharp objects on the floor. After your first warning for non-compliance, I will start taking 2 pts. from your final grade for each infraction.

- **You are also required to wear pants when operating presses and cleaning up screens in the washout room.**

Clean-Ups:

- You will be required to complete **(5)** 15-minute cleanups. There will be a total of 75 points tied to your cleanups. It is *your responsibility* to get your lab instructor or TA to sign off on your cleanups. Cleanups are an integral part of the experiences in lab, they provide the student and the program with the following valuable benefits:

    - •Daily and weekly maintenance of a very complex printing facility.
    - •Extra knowledge of the operation of a printing facility.
    - •Keeping the work area neat, clean and organized for better quality work.

Cost Sheets:

- A Cost Sheet (found on Canvas) should be completed as supplies are obtained throughout the project. Even materials used when mistakes are made should be recorded on the Cost Sheet. A completed Cost Sheet must be turned in at the end of the semester to Canvas that is completely filled out with each major project; lithography and screen-printing, to get credit**.**

Due Date Sheets:

- Please note your lab instructor or GA will only sign off on your due date sheet if you actually have them sign it on the due date. Failure to get a signature, even if you complete your assignment on time, will result in a loss of points. *This is YOUR responsibility*.

Incomplete grades for the course

The university policy states that a student must have only a minor part of the course work remaining to be completed and have a passing grade on the completed work to receive an incomplete. For this course, that would mean more than half of the lab assignments and more than half the homework/lecture assignments completed with all the exams completed, and a passing grade in lab AND lecture to receive an incomplete.

At the end of the semester, (the date will be posted by the day of the exam) students can immediately learn their final grades using their computer user ID and password and a touch-tone telephone (864) 656-2255, through the web iRoar site.

Article Review and Virtual Tours

Regular periodical reading and research is an integral part of a person's continued learning experience in a technical field. When you do an article review you should view it as practice on several learning areas:

1. Finding proper topical articles.

2. Assimilating the information so that you can summarize and comment (respond) to it.
3. Properly giving credit to the authors of the information you found. (Web citations also)
4. Practice communicating what you found—that includes spelling, proper punctuation and grammatical conventions.
5. Knowing the difference between a vendor's "advertisement" and a review of a vendor's product by another "uninterested" observer. This is especially difficult with web sites.
6. You will be required to complete 1 article review on an assigned topic as noted on the Lecture Schedule. It is to be one page, single spaced- including the citation.
7. The article review and virtual tour reports are due by 5 pm of the day they are due (submitted online). If the article reviews is handed in later than that, it will be reduced 10% of the final grade each day it is late.
8. **ALL** written articles will be written in a technical report format. A link to a Lynda.com tutorial on how to write a technical report will be provided on Canvas. Failure to write your articles in the proper style will result in a loss of points**.**

Computer/network/printer problems don't count for lateness!

Technical notebook:

To be turned in the final lab period of the course, this notebook should be **small enough to be carried** with you in lab. It does not need to be organized by dates. It should include notes about:

a. Name on front
b. Covered at least 7 assignments
c. Things you are told about operation of equipment, and what you discovered in its operation
d. Equipment make and model, or supply maker and name used in projects
e. Problems you had and how they were solved.
f. Computer applications used and various operations done in the software, shortcuts.
g. Legibility
h. Evidence of continued use.

Once completed, design/create a 16 page booklet about your experiences in this course. Your booklet should show some design work and include images. For instance use your phone to take photos of the various aspects of your projects and include those along with the text. The text in your final booklet is expected to come from your technical notebook, but will have to be typed out. Photos of your written pages are not acceptable for this project. For this reason it will be a good idea to type up your notes once in a while throughout the semester so it is easier to complete this final booklet at the end of the semester.

This final booklet will be due the last day of lab, printed and uploaded to Canvas as a PDF.

Suggested Textbook:

Print Production, Johansson|Lundberg|Ryberg, Wiley & Sons, New Jersey 2007

Other optional printed resources

- *Pocket Pal*, Bruno, Michael H, International Paper, Memphis, TN
- Jorgensen, G.W., Lavi, A., *Lithographic Pressman's Handbook*, Pittsburgh, PA, GATF, 1973. Ingram, Sam

T., *Screen Printing Primer*, GATF, Pittsburg, PA. 1999

- Romano, Frank, *Condensed Handbook of Composition Input*, Arlington, VA, Graphic Communications Center, (no date).
- Romano, Frank. "Inkjet Volume 2 Hostory, Technology, Markets and Applications. PIA/GATF Press. 2008
- Southworth, Miles, *Pocket Guide to Color Reproduction*, Livonia, NY, Graphic Arts Publishing Co., 1979.
- A Guide to Understanding Graphic Arts Densitometry, Booklet L7-093 (12/03) Williams, Robin, *The Mac Is Not a Typewriter*.
- Network Know-How, John Ross, 2009
- No Starch Press, Inc. 555 De Haro Street, Suite 250, San Francisco, CA 94107 ISBN-10: 1-59327-191-3

Other Sources, online:

Back up software for the Mac: http://www.bombich.com/sales/edu_pricing.html

Print Wiki link: http://printwiki.org/Title_Index

Workflow systems:
http://graphics.kodak.com/global/product/workflow_data_storage/printing_solutions/workflow_systems/prinergy/default.htm
http://www.dalim.com/en/products/twist/index.php
http://www.heidelberg.com/www/html/en/content/overview1/prinect/prinect_overview

Color and scanning: http://www.scantips.com/
http://www.signindustry.com/allarticles.php3#screen/ http://SGIA.org

(Many different places to check here: http://www.inkworldmagazine.com/
Halftone information http://qualityinprint.blogspot.com

www.images-magazine.com http://www.gfxsp.com/faq_sp3.html
Career information: http://www.makeyourmark.org/

http://www.graphiccommcentral.org/ (Graphic Comm Central: full of graphics resources)

Digital information: http://www.adobe.com

(Digital image, font technology and page layout manipulation information)
http://www.agfa.com http://www.creativepro.com
Screen printing information: http://www.screenweb.com
Our own library: http://www.lib.clemson.edu/research/subjects/graphcom/index.htm

Additional references will be supplied as necessary throughout the course.