An introduction to the dynamic relationship between inks and the materials used in printing, and the processes and characteristics of inks and papers, testing procedures used to evaluate inks and substrates.

GCM 1131 Graphic Communications Technology
3 Credit Hours. 0.2 Lecture Hours. 0.3 Lab Hours.
An introduction to careers, the printing processes and the steps involved in preparing images for production in graphic communications.

GCM 1321 Desktop Publishing
2 Credit Hours. 2 Lecture Hours. 0 Lab Hours.
This is a general course in the development, growth and influence of desktop publishing in today’s society. The course presents the various hardware and software used in desktop publishing, as well as technologies that have evolved from desktop publishing. Students are introduced to typography and typographic principles, digital photography, scanning, image resolution, photo editing, imposition and their correct use in the creation of both everyday and formal communications. Students learn what makes an aesthetically pleasing document in both formal and informal settings.
Corequisite(s): GCM 1411.

GCM 1411 Desktop Publishing Laboratory
1 Credit Hour. 0 Lecture Hours. 2 Lab Hours.
Through detailed instruction and problem solving activities, students use current desktop publishing hardware and software and apply various concepts learned in GCM 1321 (Desktop Publishing) including, drawing applications, page assembly, photo editing, digital photography, scanning, typography, aesthetics, image resolution and imposition.
Corequisite(s): GCM 1321.

GCM 1631 Introduction to Multimedia
3 Credit Hours. 0.2 Lecture Hours. 0.2 Lab Hours.
The course will introduce students to multimedia through its history, its various uses, and its different components. Students will create multimedia products and solve problems related to the creation of their components. Students will plan a multimedia presentation, create the various components and assemble those components into an effective multimedia presentation using current digital technologies.

GCM 2332 Bindery and Finishing
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
Designed to orient the student to the various bindery, finishing, and distribution processes and practices common to the printing industry. Plant visits to bindery, finishing, and distribution firms. Prerequisite(s): A minimum grade of "C" in GCM 1131.
Corequisite(s): GCM 2412.

GCM 2412 Bindery and Finishing Laboratory
1 Credit Hour. 0 Lecture Hours. 2 Lab Hours.
Designed to engage students with the processes and real world problems of bindery, finishing, and distribution processes and practices common to the printing industry. Plant visits to bindery, finishing, and distribution firms. Prerequisite(s): A minimum grade "C" in GCM 1131.
Corequisite(s): GCM 2332.

GCM 2432 Inks and Substrates
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
An introduction to the dynamic relationship between inks and the materials on which they are printed. Areas of concern include the manufacturing processes and characteristics of inks and papers, testing procedures used with inks and substrates.
Prerequisite(s): A minimum grade of "C" in GCM 1131.

GCM 2512 Desktop Publishing II Laboratory
1 Credit Hour. 0 Lecture Hours. 2 Lab Hours.
A laboratory experience that uses detailed instruction and problem solving activities, which students complete through the use of current desktop publishing hardware and software. This course supports the concepts learned in Desktop Publishing II (GCM 2532) through hands-on activities. Topics include digitizing originals, file format usage and creation, file preflight, image trapping, digital imposition, advanced image editing techniques and concepts and advanced desktop publishing techniques and concepts. Prerequisite(s): A minimum grade of "C" in GCM 1321 and GCM 1411. Corequisite(s): GCM 2532.

GCM 2532 Desktop Publishing II
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
This course builds on the concepts learned in Desktop Publishing (GCM 1321) and expands on the relationship between desktop publishing and digital prepress. Students examine the techniques and technologies used to create the visual images we see all around us. The concepts taught move the student from beginning desktop publishing into the world of digital prepress. Topics include the prepress working environment, hardware and software considerations, font and file management, bitmap and vector graphics, digital image characteristics, digital imposition, and digital image trapping. Prerequisite(s): A minimum grade of "C" in GCM 1321, GCM 1411.
Corequisite(s): GCM 2512.

GCM 2721 Industrial Practicum
2 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Designed for direct observation and work experience with the local printing industry. The student is exposed to problems, practices, management structures, and work ethics.
Prerequisite(s): A minimum grade of "C" in GCM 1131, GCM 1321.

GCM 3110 Instructional Assistance
1 Credit Hour. 0 Lecture Hours. 3 Lab Hours.
A supervised experience in the instructional process (on the university level) through direct participation in a laboratory situation. Grading is evaluated on a satisfactory/unsatisfactory basis only. This course may be repeated for a total of three semester hours.
Prerequisite(s): Departmental approval required.

GCM 3130 Customer Service for Graphic Communications
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
A course designed to acquaint the students with duties and responsibilities associated with customer service for graphic communications management.

GCM 3231 Print Media Processes
3 Credit Hours. 2 Lecture Hours. 2 Lab Hours.
An intermediate technical study of lithography, flexography, screen and specialty printing and digital output processes and the image preparation requirements for each. The course will provide experiences that demonstrate the similarities and differences of print media and discuss criteria for choosing one versus another. Students will gain a greater understanding of the mass production options available for graphic communication.
Prerequisite(s): A minimum grade of "C" in GCM 1131, GCM 1321, GCM 1411.

GCM 3735 Graphic Communications Internship I
3 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Designed for students to receive practical work experience with an approved graphic communications firm. A minimum of 400 contact hours with the host site is required.
Prerequisite(s): A minimum grade of "C" in GCM 1131 and a minimum 7 hours from GCM 2432, GCM 2332, GCM 2412, GCM 2532, GCM 2512.
GCM 3745 Graphic Comm Internship I
4 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Designed for students to receive practical work experience with an approved graphic communications firm. A minimum of 480 contact hours with the host site is required. Graphic Communications Management Majors.
Prerequisite(s): A minimum grade of "C" in GCM 2721.
Cross Listing(s): GCM 3735.

GCM 4132 Screen and Specialty Printing
3 Credit Hours. 0.2 Lecture Hours. 0.2 Lab Hours.
This course introduces the student to the methods, procedures and technologies used in the screen and specialty printing industry, including screen printing, pad printing, sublimation printing and embroidery. Projects and discussions involve the various production methods and material requirements. Experiences include planning, image preparation, image carrier preparation, single and multi-color printing, medium curing and drying, finishing and hands-on experiences with the various process.
Prerequisite(s): A minimum grade of "C" in GCM 3231.

GCM 4232 Photo Preparation for Reproduction
3 Credit Hours. 0.2 Lecture Hours. 0.2 Lab Hours.
A combination of traditional and digital photography techniques is used to enhance the quality of the original photograph. The focus of the class is on creating images which maximize resolution while reducing editing requirements. Students choose and use various lighting arrangements and output techniques to improve final image quality.
Prerequisite(s): A minimum grade of "C" in GCM 1131 and MMJ 3333.

GCM 4736 Graphic Communications Internship II
3 Credit Hours. 0 Lecture Hours. 0 Lab Hours.
Designed for students to further their industry experience beyond GCM 3735. A minimum of 400 hours contact hours with the host site is required.
Prerequisite(s): A minimum grade of "C" in GCM 3735 or GCM 3745.

GCM 4899 Independent Study
1-3 Credit Hours. 0-3 Lecture Hours. 0-3 Lab Hours.
Independent study is available for the student to undertake individualized experimentation, research, or study related to the printing industry. The specific topic will be determined and approved by the faculty and the student prior to the semester in which the course is taken. Academic credit is assigned to the independent study commensurate with the magnitude of the study.

GCM 5090 Selected Topics in Graphic Communications
1-3 Credit Hours. 0-3 Lecture Hours. 0-3 Lab Hours.
This course is scheduled on an infrequent basis to explore special areas in technology and will carry a subtitle. Credit is variable from 1 to 3 semester hours. This special topics course is in keeping with established policies for offering a structured course on an infrequent basis. It will allow faculty to offer a course on a trial basis for possible approval at a later date.
Cross Listing(s): GCM 5090G.

GCM 5090G Selected Topics in Graphic Communications
1-3 Credit Hours. 0-3 Lecture Hours. 0-6 Lab Hours.
This course is scheduled on an infrequent basis to explore special areas in technology and will carry a subtitle. Credit is variable from 1 to 3 semester hours. This special topics course is in keeping with established policies for offering a structured course on an infrequent basis. It will allow faculty to offer a course on a trial basis for possible approval at a later date. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Cross Listing(s): GCM 5090.

GCM 5234 Color Reproduction
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
An exploration of professional color reproduction concepts and procedures related to the graphic communications and information technology industries. Topics include color theory, copy evaluation, color separation methods, color reproduction variables, color separation hardware and software, and color management systems.
Prerequisite(s): A minimum grade of "C" in GCM 3745.
Corequisite(s): GCM 5314.
Cross Listing(s): GCM 5234G.

GCM 5234G Color Reproduction
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
An exploration of professional color reproduction concepts and procedures related to the graphic communications and information technology industries. Topics include color theory, copy evaluation, color separation methods, color reproduction variables, color separation hardware and software, and color management systems. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Prerequisite(s): A minimum grade of "C" in GCM 3745.
Corequisite(s): GCM 5314G.
Cross Listing(s): GCM 5234.

GCM 5314 Color Reproduction Laboratory
1 Credit Hour. 0 Lecture Hours. 2 Lab Hours.
This is a hands on laboratory course. The laboratory activities include the following: test for abnormal color vision, color measurement and evaluation, color standards, color proofing, color scanning, color reproduction methods, color management systems, color reproduction techniques using Photoshop and other software.
Prerequisite(s): A minimum grade of "C" in GCM 3735 (requisited for Graphic Communications Management majors only; IT second discipline students and GCM minor students should consult with the assigned GCM program advisor).
Corequisite(s): GCM 5314G.
Cross Listing(s): GCM 5314.

GCM 5314G Color Reproduction Laboratory
1 Credit Hour. 0 Lecture Hours. 2 Lab Hours.
This is a hands on laboratory course. The laboratory activities include the following: test for abnormal color vision, color measurement and evaluation, color standards, color proofing, color scanning, color reproduction methods, color management systems, color reproduction techniques using Photoshop and other software. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Prerequisite(s): A minimum grade of "C" in GCM 3735.
Corequisite(s): GCM 5314G.
Cross Listing(s): GCM 5314.

GCM 5331 Flexography
3 Credit Hours. 0.2 Lecture Hours. 0.2 Lab Hours.
Introduction to the flexographic printing industry. Discussions will include the design, techniques, processes, and manufacture of flexographic printed products. Activities will include setup and operation of a flexographic press.
Prerequisite(s): A minimum grade of "C" in GCM 3231.
Cross Listing(s): GCM 5331G.

GCM 5331G Flexography
3 Credit Hours. 2 Lecture Hours. 2 Lab Hours.
Introduction to the flexographic printing industry. Discussions will include the design, techniques, processes, and manufacture of flexographic printed products. Activities will include setup and operation of a flexographic press. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Prerequisite(s): A minimum grade of "C" in GCM 3231.
Cross Listing(s): GCM 5331.
GCM 5332 Multimedia Presentations
3 Credit Hours. 0.2 Lecture Hours. 0.2 Lab Hours.
Multimedia Presentations is the study of digital imaging applications for presentations. The course covers the creation of digital components for multimedia presentations, including sound, graphics, animation, and video technique, and their use in multimedia presentations for video, CD ROM, and the Internet.
Prerequisite(s): A minimum grade of "C" in GCM 1631.
Cross Listing(s): GCM 5332G.

GCM 5332G Multimedia Presentations
3 Credit Hours. 2 Lecture Hours. 2 Lab Hours.
Multimedia Presentations is the study of digital imaging applications for presentations. The course covers the creation of digital components for multimedia presentations, including sound, graphics, animation, and video technique, and their use in multimedia presentations for video, CD ROM, and the Internet. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Prerequisite(s): A minimum grade of "C" in GCM 1631.
Cross Listing(s): GCM 5332G.

GCM 5334 Imaging Systems
3 Credit Hours. 0.2 Lecture Hours. 0.2 Lab Hours.
Imaging Systems is an in-depth course of how to effectively use, organize, and link imaging workstations, peripherals, systems, and files for information imaging. Current trends and issues of the industry are also covered.
Prerequisite(s): A minimum grade of "C" in GCM 3745. Cross Listing(s): GCM 5334G.

GCM 5334G Imaging Systems
3 Credit Hours. 2 Lecture Hours. 2 Lab Hours.
Imaging Systems is an in-depth course of how to effectively use, organize, and link imaging workstations, peripherals, systems, and files for information imaging. Current trends and issues of the industry are also covered. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Prerequisite(s): A minimum grade of "C" in GCM 3745.
Cross Listing(s): GCM 5334.

GCM 5335 Graphic Communications Management Topics
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
Course topics focus specifically on managerial decisions as they uniquely apply to graphic communications, such as: facilities planning and production flow, trade customs, contracts, and quality control and testing.
Prerequisite(s): A minimum grade of "C" in GCM 3745.
Cross Listing(s): GCM 5335G.

GCM 5335G Graphic Communications Management Topics
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
Course topics focus specifically on managerial decisions as they uniquely apply to graphic communications, such as: facilities planning and production flow, trade customs, contracts, and quality control and testing. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Prerequisite(s): A minimum grade of "C" in GCM 3745.
Cross Listing(s): GCM 5335.

GCM 5434 Lithographic Reproduction
3 Credit Hours. 2 Lecture Hours. 3 Lab Hours.
Designed to introduce the student to image assembly for presswork. Topics include imposition layouts, image assembly, platemaking, proofing systems, press operation and safety.
Prerequisite(s): A minimum grade of "C" in GCM 3231.
Cross Listing(s): GCM 5434G.

GCM 5434G Lithographic Reproduction
3 Credit Hours. 2 Lecture Hours. 3 Lab Hours.
Designed to introduce the student to image assembly for presswork. Topics include imposition layouts, image assembly, platemaking, proofing systems, press operation and safety. Graduate students will do a research project related to course content and present their finding to the class.
Prerequisite(s): A minimum grade of "C" in GCM 3231.
Cross Listing(s): GCM 5434.

GCM 5534 Digital Output Applications
3 Credit Hours. 0.2 Lecture Hours. 0.2 Lab Hours.
Covers the utilization of electronic imaging technologies for output applications for information imaging. Specific topics include internet development and management, and print-on-demand development and management.
Prerequisite(s): A minimum grade of "C" in GCM 3231.
Cross Listing(s): GCM 5534G.

GCM 5534G Digital Output Applications
3 Credit Hours. 2 Lecture Hours. 2 Lab Hours.
Covers the utilization of electronic imaging technologies for output applications for information imaging. Specific topics include internet development and management, and print-on-demand development and management. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Prerequisite(s): A minimum grade of "C" in GCM 3231.
Cross Listing(s): GCM 5534.

GCM 5535 Estimating for Print Production
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
Acquaints the student with various types of estimating practices used for print production. The student will learn how to measure cost centers, calculate materials used and conceptualize the production process.
Prerequisite(s): A minimum grade of "C" in GCM 3745.
Cross Listing(s): GCM 5535G.

GCM 5535G Estimating for Print Production
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.
Acquaints the student with various types of estimating practices used for print production. The student will learn how to measure cost centers, calculate materials used and conceptualize the production process. Graduate students will be given an extra assignment determined by the instructor that undergraduates are not required to complete.
Prerequisite(s): A minimum grade of "C" in GCM 3745.
Cross Listing(s): GCM 5535.