



New York City College of Technology  
The City University of New York

Department of Advertising Design & Graphic Arts

GRA 1230 Print Technologies

### Course Description

A two-part lecture and lab course in study of the evolution of printing from the sociological and technical perspective. This course will give the student a full overview of the relationship between print technological advancements and their effect on the societies utilizing them to harness the power of the message those technologies could print.

The academic experience is coupled with hands-on press experience, culminating in the production of two distinct printed projects by utilizing all the pre-press, printing and finishing equipment in the New York City College of Technology printing lab. Print formats, plate making, proofing definitions, terminology and techniques, letterpress and offset printing, binding and finishing and stamping techniques will be covered.

3 Credits, 4 Hours (1 lecture hrs, 3 lab hrs)

### Co- or Prerequisite

GRA 1110/GA 110 Foundations in Graphic Communications

ADV 1162 Raster and Vector Graphics

### Course Objectives

| INSTRUCTIONAL OBJECTIVES   | LECTURE ASSESSMENT   | LABORATORY ASSESSMENT  |
|--|--|--|
| <b>For the successful completion of this course, students should be able to:</b>   | <b>Evaluation methods and criteria</b>   | <b>Evaluation methods and criteria</b>   |
| 1) Identify major technical developments in the evolution of the print medium, replete with their inventors and innovators; learn and distinguish between the eras in the history of print | 1) Articulate the important shifts in technology in a research paper, <i>Weeks 1-5</i> ; | 1) Use of appropriate and accurate terminology; bi-weekly quizzes given to enforce proper usage; keeping a learning journal to relate lab work to lecture topics, <i>Weeks xx and xx</i> ; |
| 2) Analyze and report on the effects of print media on historical events both in the US  | 2) Express ideas and research through a series of quizzes, a seminar                     | 2) Research the context for the two printed projects, <i>Weeks xx and</i>  |

|   |  |  |
|---|--|--|
| and around the world.   | report and a final paper or project. <i>Weeks xx,xx,xx.</i>                                | <i>xxx;</i>  |
| 3) Develop the ability to give cogent presentations involving researched material and/or developed finished printed projects.           | 3) Present two projects, one with a group, the other individually, <i>Weeks xx and xx;</i> | 3) Present 25 clean copies of a letterset printed project and present 100 clean copies of an original two-color offset-printed piece to their fellow classmates, <i>Weeks xx, xx.</i>  |
| 4) Demonstrate the ability to apply technical knowledge to printed projects as an aesthetic decision as recommended by the instructors. | 4)   | 4) .) Demonstrate the ability to follow the computer-to-plate workflow throughput to evaluating the various types of proofs; Accurately set and print 25 clean copies of XXX lines of metal type on NYCCT's letterpress; print 100 clean copies of an original two-color offset-printed piece; and demonstrate folding, binding and stamping techniques in any combination on their printed projects, <i>Weeks 5-14.</i> |
| 5) Demonstrate a knowledgeable perspective on the history and significance of print.  | 5) Take and pass two examinations, <i>Weeks 8 and 15.</i>                                  | 5) Through the realization of two printed projects, students are able to assess the impact of multiplicity of manufactured communication items.  |

### Teaching/Learning Method

#### Lecture:

The lecture section is taught during a single weekly two-hour block of time. The instructor will give lectures, assign substantial readings, and devise pertinent oral and written presentations on key topics.

Students are expected to study and demonstrate knowledge of the technological, cultural and political histories of print. They will be split into small work groups and encouraged to participate in small group discussions (as in critiques of projects, for example). Students will write well-developed research papers to start out the semester. Then there is a group presentation, to be developed by the small groups and given orally in front of the entire class. The groups will be judged on professionalism of presentation as well as quality of research.

The final project will be a multimedia presentation including visuals that support the thesis of the presentation. These visuals may be videos from YouTube, PowerPoint slides, or interactive PDFs, depending on the skillset of the particular student.

The Blackboard Internet application is used in this course to provide access to course materials, keep current with course developments and allow students to communicate, collaborate and submit course assignments inside and outside the classroom. The Horizon Wimba collaborative function of Blackboard is used to enhance the learning environment inside the classroom beyond the ambiance of a single projector and screen. Horizon Wimba also allows students to collaborate on projects and develop more focused critical thinking regarding the course material and assignments.

**Laboratory:**

The three lab hours are scheduled during the week. During the first half-hour, the craft element to be practiced by the students over the following two and one half hours is taught and demonstrated. Students are expected to come prepared to class with their materials and supplies, as well as their reading and research assignments completed.

Students in this class are expected to explore, construct and demonstrate knowledge of the technology, terminology, skills, tools, policies and procedures to understand the applied theory and management of letterpress and offset printing technology. This includes the fundamentals of publication production, analysis, editing, storage, output and distribution technologies and processes. Students are expected to work individually and in small teams to document, analyze and apply learning about key pre-press, printing and finishing concepts. Each student is required to demonstrate an understanding of the topics from reading resource material and completing their two printed projects. Students are expected to articulate their thoughts during class sessions in the form of discussions and presentations.

The final presentation will consist of presenting two finished printed pieces produced in class.

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collaborate on projects and develop more focused critical thinking regarding the course material and assignments.

### Required Texts

#### LECTURE:

*A Short History of the Printed Word*, Warren Chappell

*Strunk and White, Elements of Style*

Lectures, reference and supplemental materials will also be provided on Blackboard

#### LABORATORY:

### Recommended Texts

#### LECTURE:

*The Printing Revolution in Early Modern Europe*, Elizabeth L. Eisenstein

*The Printing Press as an Agent of Change*, Elizabeth L. Eisenstein

*The Gutenberg Galaxy: The Making of Typographic Man*, Marshall McLuhan

*A Short History of the Printed Word*, Warren Chappell

#### LABORATORY:

### Grading Plan

| LECTURE                         | LABORATORY                                     |
|---------------------------------|--|
| In-class                        | In-class                                       |
| Productivity.....10%            | Productivity.....5% <sup>1</sup>               |
| Quizzes.....10%                 | Homework Assignments.....5% <sup>2</sup>       |
| Homework Assignments.....5%     | Quizzes.....10% <sup>3</sup>                   |
| Multimedia Presentation.....15% | Learning Journal.....20% <sup>4</sup>          |
| Research Paper.....20%          | Letterpress printed piece.....25% <sup>5</sup> |
| Group Presentation.....20%      | Offset printed piece.....25% <sup>6</sup>      |
| Exams.....20%                   | Finishing Techniques.....10% <sup>7</sup>      |
| <b>TOTAL</b> <b>100%</b>        | <b>TOTAL</b> <b>100%</b>                       |

1. In-class productivity includes asking and answering questions, preparedness to accomplish lab tasks, collaboration with classmates on projects
2. Homework assignments range from researching samples to creating printable graphics. They are to be completed in a timely manner to ensure the safe and successful completion of the two printed projects.
3. Quizzes are to test students on their assimilation of proper techniques and terminology.
4. Learning journal is a small notebook keep with lab notes for the student to refer to in the process of realizing his/her lab projects. Entries are expected to be made in class and during the week as the steps in the manufacturing chain progress.

5. The Letterpress printed piece is a substantial part of the grade. It will be graded firstly, for the execution of its printing technique, followed the evaluation of the originality of the application of the printed methodology, and lastly, followed by the aesthetic evaluation of the content of the piece.
6. The Offset printed piece is a substantial part of the grade. It will be graded firstly, for the execution of its printing technique, followed the evaluation of the originality of the application of the printed methodology, and lastly, followed by the aesthetic evaluation of the content of the piece.
7. The finishing of the piece is the conclusion of it. It will be graded firstly, for the execution of the technique, followed the evaluation of the originality of the application of the methodology.