

Student's Name/Initials

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Date

Teacher's Initials

Date

Introduction to Graphic Communications
Course Codes for Graphic Communications program: 5205, 6200, 6201, 6202, and 6203

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DIRECTIONS: Evaluate the student using the applicable rating scales below and check the appropriate box to indicate the degree of competency. The ratings 3, 2, 1, and N are not intended to represent the traditional school grading system of A, B, C, and D. The description associated with each of the ratings focuses on the level of student performance or cognition for each of the competencies listed below.

CREDIT: 1 unit

PERFORMANCE RATING

- 3 - Skilled--can perform task independently with no supervision
- 2 - Moderately skilled--can perform task completely with limited supervision
- 1 - Limitedly skilled--requires instruction and close supervision
- N - No exposure--has no experience or knowledge of this task

COGNITIVE RATING

- 3 - Knowledgeable--can apply the concept to solve problems
- 2 - Moderately knowledgeable--understands the concept
- 1 - Limited knowledge--requires additional instruction
- N - No exposure--has not received instruction in this area

A. INDUSTRY OVERVIEW

Graphic Communications Industry

3 2 1 N

- ___ ___ ___ ___ 1. Define the graphic communications industry.
- ___ ___ ___ ___ 2. Describe the size and economic value of the industry:
 - a. employees,
 - b. number of establishments,
 - c. revenue, and
 - d. profit levels.
- ___ ___ ___ ___ 3. Identify the types of businesses and organizations that comprise the industry.
- ___ ___ ___ ___ 4. Review the types of products and services provided by the industry.
- ___ ___ ___ ___ 5. Evaluate the use and value of different types of printing to a customer.

- ___ ___ ___ ___ 6. Describe the markets that use printing:
 - a. direct mail,
 - b. books,
 - c. magazines,
 - d. stationery, and
 - e. packaging.
- ___ ___ ___ ___ 7. Compare the role (cost and effectiveness) of print compared to other communication mediums:
 - a. television,
 - b. radio,
 - c. Internet, and
 - d. social media.
- ___ ___ ___ ___ 8. Assess examples of different types of communications mediums.
- ___ ___ ___ ___ 9. Identify local and national graphic communications associations.
- ___ ___ ___ ___ 10. Describe the purpose of local and national graphic communications associations.

Printing Process

- ___ ___ ___ ___ 11. Describe common printing processes:
 - a. flexography,
 - b. gravure,
 - c. letterpress,
 - d. offset lithography,
 - e. screen printing, and
 - f. digital.
- ___ ___ ___ ___ 12. List common products produced by each printing process.
- ___ ___ ___ ___ 13. Identify samples of each printing process.
- ___ ___ ___ ___ 14. Discuss advantages and disadvantages of each printing process:
 - a. economic,
 - b. delivery timeframe, and
 - c. physical characteristics of printed piece.
- ___ ___ ___ ___ 15. Define counterfeiting, copyright, and intellectual property infringement.
- ___ ___ ___ ___ 16. Identify the uses and challenges associated with counterfeiting, copyright, and intellectual property infringement in the printing industry.

- ___ ___ ___ 17. Discuss emerging technologies related to printing:
- 3D printing,
 - nanography,
 - production inkjet,
 - Quick Response Codes (QR),
 - cross media communications,
 - Augmented Reality (AR),
 - data driven input, and
 - cloud based composition.

How Printing Is Produced

3 2 1 N

- ___ ___ ___ 18. Describe the function and use of basic production equipment used in a commercial printing plant:
- computer workstation,
 - scanner,
 - proofing device,
 - platesetter,
 - offset lithographic press,
 - digital press,
 - paper cutter,
 - folder,
 - saddle stitcher,
 - perfect binder,
 - paper padding press, and
 - paper drill.
- ___ ___ ___ 19. Define workflow.
- ___ ___ ___ 20. Review common steps in a typical print workflow:
- digital file preparation,
 - print, and
 - finish.
- ___ ___ ___ 21. Describe the purpose of a job ticket.
- ___ ___ ___ 22. Locate key production information on a job ticket.
- ___ ___ ___ 23. Identify departments within printing organization through live or virtual observation.
- ___ ___ ___ 24. Describe the role and responsibilities of departments within printing organization:
- sales,
 - estimating,
 - file preparation,
 - printing,
 - binding, and
 - shipping.

B. SAFETY AND HEALTH

Safety Rules

3 2 1 N

- ___ ___ ___ 25. Review applicable national and local governmental safety regulations.
- ___ ___ ___ 26. Review school graphic lab's safety regulations.
- ___ ___ ___ 27. Explain the use and locations of safety interlocks on machinery.
- ___ ___ ___ 28. Identify safety regulations in place at the school graphic lab as they relate to proper paper movement.
- ___ ___ ___ 29. List the school graphic lab Standard Operating Procedures (SOP) for spills.
- ___ ___ ___ 30. Explain the proper procedures to clean up any spills at school graphic lab.
- ___ ___ ___ 31. List the proper procedures when handling cleaning chemicals.

Safety Data Sheets

3 2 1 N

- ___ ___ ___ 32. Describe a Safety Data Sheet.
- ___ ___ ___ 33. Explain the use of Safety Data Sheet.
- ___ ___ ___ 34. Evaluate the Safety Data Sheets in place in the school graphic lab.

C. FILE CREATION TO OUTPUT

File Creation and Design

3 2 1 N

- ___ ___ ___ 35. Identify common components of page:
- text,
 - illustrations, and
 - photographs.
- ___ ___ ___ 36. Proofread and edit page of text, making corrections/adjustments as specified by instructor.
- ___ ___ ___ 37. Define these terms: page layout, image editing, and illustration.

- ___ ___ ___ 38. Review professional software applications:
- page layout, e.g., Adobe InDesign, QuarkXPress;
 - image editing, e.g., Adobe Photoshop; and
 - illustration, e.g., Adobe Illustrator.
- ___ ___ ___ 39. Review office/home-based software applications:
- Microsoft Office and
 - Google Docs.
- ___ ___ ___ 40. Create a page that includes fonts, styles, margins, indents, tabs, photographs, and illustrations using professional layout software.
- ___ ___ ___ 41. Create and print a portfolio to showcase your work.
- ___ ___ ___ 42. Assess the significance of Adobe Acrobat Portable Document Format (PDF) as it pertains to the graphic communications industry.
- ___ ___ ___ 43. Create PDF of page that includes photographs and illustrations.
- ___ ___ ___ 44. Compare the differences between supplying PDF files versus native files for print.
- ___ ___ ___ 45. Define RGB and CMYK color reproduction.
- ___ ___ ___ 46. Discuss the Pantone color process.
- ___ ___ ___ 47. Contrast color reproduction viewed on digital display (e.g., monitor, TV, tablet, smartphone) versus print.
- ___ ___ ___ 48. Show the effect of lighting on printed color perception.
- ___ ___ ___ 49. Identify different types of graphics:
- line art,
 - continuous tone,
 - raster, and
 - vector.
- ___ ___ ___ 50. Describe pixels per inch resolution.
- ___ ___ ___ 51. Cite examples of various file formats and their extensions: .doc, .pdf, .tif, .eps, .jpg, .bmp, .indd, .ai, .xls, and .ePub.

- ___ ___ ___ 52. Review minimum resolution requirements for different reproduction devices:
- screen display and
 - print.
- ___ ___ ___ 53. Compare use of scanner versus lens based image capture (digital camera).

Print Output

- 3 2 1 N
- ___ ___ ___ 54. Describe preflighting.
- ___ ___ ___ 55. List common file issues found during preflight.
- ___ ___ ___ 56. Collect examples of four printed color applications:
- Sunday newspaper retail insert;
 - cereal package;
 - clothing catalog; and
 - high end brochure (automotive, cosmetic).
- ___ ___ ___ 57. Compare color quality reproduction requirements:
- Sunday newspaper retail insert;
 - cereal package;
 - clothing catalog; and
 - high end brochure (automotive, cosmetic).
- ___ ___ ___ 58. Define imposition.
- ___ ___ ___ 59. Define trapping.
- ___ ___ ___ 60. Define bleed.
- ___ ___ ___ 61. Gather samples of full bleed and no bleed printed examples.
- ___ ___ ___ 62. Explain the purpose of proofing.
- ___ ___ ___ 63. Compare hard and soft proofs.

Digital Output

- ___ ___ ___ 64. Review how content may be published digitally:
- publishing to the Web,
 - social media, and
 - mobile devices.
- ___ ___ ___ 65. Define e-publishing/e-books.

- ___ ___ ___ 66. Compare the advantages/-disadvantages of e-publishing/e-books versus traditional books.

D. OFFSET PRESS

Offset Lithographic Press

- 3 2 1 N
- ___ ___ ___ 67. Discuss the imaging process of an offset lithographic press.

Components of Offset Lithographic Press

- 3 2 1 N
- ___ ___ ___ 68. Review components of an offset press.
- Describe a printing unit:
 - inking system,
 - water system,
 - plate cylinder,
 - blanket cylinder, and
 - impression cylinder.
- ___ ___ ___ 69. Compare feeding system of a sheet fed press (roll and sheetfed).

Quality

- 3 2 1 N
- ___ ___ ___ 70. Describe the use of color bars.

E. DIGITAL PRESS

Digital Press

- 3 2 1 N
- ___ ___ ___ 71. Discuss the imaging process of a digital press.

Components of a Digital Press

- 3 2 1 N
- ___ ___ ___ 72. Review components of digital presses:
- digital front end Raster Image Processor (RIP),
 - print engine, and
 - toner based (electrophotography) and
 - inkjet
 - delivery systems.
 - roll to roll,
 - stacker, and
 - in-line finishing

F. SUBSTRATES

- 3 2 1 N
- ___ ___ ___ 73. Discuss the impact that substrates have on a printed project.
- ___ ___ ___ 74. Identify wood pulp based paper substrates.
- ___ ___ ___ 75. Review common paper types, weights, grades and classifications commonly used in the printing industry.
- ___ ___ ___ 76. List common page and sheet sizes used in the United States and Europe.
- ___ ___ ___ 77. Describe parent sheet.
- ___ ___ ___ 78. Identify nontraditional specialty substrates.
- ___ ___ ___ 79. Gather examples of pulp, plastic, and metal based substrates.
- ___ ___ ___ 80. Discuss sustainability/recyclability of pulp based substrates.
- ___ ___ ___ 81. Debate sustainability of print versus digital media.
- ___ ___ ___ 82. Describe Forest Stewardship Council (FSC) certified papers.

G. BINDERY, FINISHING AND DISTRIBUTION

Bindery and Finishing

3 2 1 N

- ___ ___ ___ 83. Determine grain direction of paper.
- ___ ___ ___ 84. Explain the importance of grain direction.
- ___ ___ ___ 85. Describe a folded signature.
- ___ ___ ___ 86. Describe bindery and finishing options.
 - a. loose leaf,
 - b. saddle stitch,
 - c. perfect bind,
 - d. case binding,
 - e. lay flat binding,
 - f. die cutting,
 - g. embossing/debossing, and
 - h. foil stamping.

___ ___ ___ 87. Contrast use and benefits of each binding option.

___ ___ ___ 88. Create 16 page saddle stitch booklet.

Finishing Equipment

3 2 1 N

- ___ ___ ___ 89. Describe in-line, near-line and off-line finishing.
- ___ ___ ___ 90. Identify commonly used finishing and binding equipment and supplies:
 - a. padding,
 - b. stapling,
 - c. stitching,
 - d. punching/drilling,
 - e. folding, and
 - f. collating.

H. MATH AND MEASUREMENT

3 2 1 N

- ___ ___ ___ 91. Describe English and Metric measurement systems.
- ___ ___ ___ 92. Define Points and Picas.

- ___ ___ ___ 93. Demonstrate the measurement of type in points and line length in picas.
- ___ ___ ___ 94. Calculate reduction or enlargement percentage of original photograph to final size.
- ___ ___ ___ 95. Determine optimum layout for minimizing waste when cutting smaller sheets out of larger parent sized sheet of paper.

I. JOB APPLICATION AND INTERPERSONAL SKILLS

3 2 1 N

- ___ ___ ___ 96. Review roles and responsibilities of employment positions in the graphic communications industry:
 - a. sales representative,
 - b. customer service representative,
 - c. estimator,
 - d. designer,
 - e. database programmer,
 - f. pre-media technician,
 - g. press operator,
 - h. bindery operator, and
 - i. management.
- ___ ___ ___ 97. Describe work ethic skills that should be exhibited by employees in the graphic communications industry.
- ___ ___ ___ 98. Describe the positive and negative impact of social media on a personal brand or perception.
- ___ ___ ___ 99. Identify basic salary/wage expectation ranges for major occupations in the graphic communications industry.
- ___ ___ ___ 100. Locate job listings through a variety of sources (e.g., Internet, job boards, "Help Wanted" advertisement, job fairs, agencies).
- ___ ___ ___ 101. Gather job postings for positions in the graphic communications industry.

- ___ ___ ___ 102. Write a personal resume that highlights the candidate's experience, skills, and talents, and which includes references.
- ___ ___ ___ 103. Write a cover letter for a specific job that differentiates the candidate from other job seekers.
- ___ ___ ___ 104. Demonstrate how to customize a resume and cover letter to match a job listing and employer.
- ___ ___ ___ 105. Complete an employment application form.
- ___ ___ ___ 106. Discuss and demonstrate ways to prepare for a successful interview.
- ___ ___ ___ 107. Identify common interview problems.
- ___ ___ ___ 108. Prepare responses to common interview questions.
- ___ ___ ___ 109. Develop appropriate questions to ask prospective employers during interviews.
- ___ ___ ___ 110. Conduct a mock job interview conducted by a teacher, parent, or another student.
- ___ ___ ___ 111. Prepare a letter or e-mail to follow up with a job interview.
- ___ ___ ___ 112. Evaluate an employment benefits package.
- ___ ___ ___ 113. Compare job opportunities, including wages, benefits, responsibilities, and potential career growth.