I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

CGR-214 Bindery 3 Units
Formerly listed as: CGR - 214: Printing Presses and Bindery 1
Introduction to bindery work: planning, paper cutting, folding, assembling, finish work and packaging. Die cutting materials, Scoring, Numbering, Foil stamping, and embossing Field trips might be required. Course is applicable to the associate degree.

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

A. Cutter
   1. Single cuts
   2. Multi Cuts with a program
   3. Trimming printed jobs

B. Folder
   1. Table top folder
      a. letter fold
      b. accordion fold
      c. folding in half
      d. production folding
   2. Floor model folder with Right Angle
      a. Fold in Half
      b. Fold letter fold
      c. Fold accordion fold
      e. Right angle folds

C. Stitcher
   1. Side stitching
   2. Saddle stitching
   3. Changing wire and clinchers for production stitching

D. Drilling
   1. Three hole drill set up for 8 1/2 x 11 binder size
   2. Three hole drill set up for 5 1/2 x 8 1/2 binder size
   3. Round cornering
4. drill maintenance

E. Padding Press
   1. Padding compound
   2. Fan A Part Adhesive
   3. Packaging

F. Heidelberg Windmill
   1. Paper feeding
   2. Scoring
   3. Perforating
   4. Die Cutting
   5. Numbering
   6. Foil Stamping

7. Embossing

G. Binding Systems
   1. Thermal Binding
   2. Coil Binding
   3. Comb Binding
   4. Perfect Binding

H. Paper
   1. Sizes
   2. Weights
   3. Grain
   4. Textures
   5. Carbonless
   6. Making paper
   7. Paper cut calculations
   8. Specialty papers

2. Required Lab Content:
   A. Cutting
   B. Folding
   C. Stitching
   D. Padding
   E. Drilling
   F. Binding
Coil
Thermal
G. Specialty Press (Heidelberg Windmil)
H. Specialty equipment

B. ENROLLMENT RESTRICTIONS

1. **Requisite Skills**
   
   *Before entering the course, the student will be able to:*
   
   a. Web the Flexographic Press

C. **HOURS AND UNITS**

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<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>Lect</td>
<td>18.00</td>
<td>1.00</td>
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<tr>
<td>Lab</td>
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<td>2.00</td>
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D. **METHODS OF INSTRUCTION (TYPICAL)**

*Instructors of the course might conduct the course using the following method:*

1. Related material will be presented through combined lecture, discussion, and lab demonstrations.
2. Computer-assisted activities will be completed to develop skills in related topics.
3. Additional studies will be required from instructional manuals specific to equipment employed.
4. Cut plans will be dimensioned to meet a prescribed bindery format.
5. Mastery of each unit will be demonstrated by the completion of related lab projects.
6. In addition to course text, technical manuals will be studied to ascertain individual machine operation.
7. Simulated maintenance will be conducted on varied pieces of equipment to correlate theory to practical application.
8. Audio visual presentations will augment lecture: (film, slides, video, Power point, transparencies).
9. Guided tours of printing plants/businesses and related plants such as a paper mill.

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   Weekly reading related to the weeks lecture.
   Weekly homework related to, or from text.
   Semester paper from research on specific Bindery area.
2. **EVIDENCE OF CRITICAL THINKING**

Assignments require the appropriate level of critical thinking

When adjusting the second fold of a letter fold how do you know which way to make your adjustment (leveling or increasing or decreasing the closing flap length?)

Pre-plan in order the cuts for a 10-up business card and list the cut lengths in order to program the cutter.

Evaluate the embossing die position to the foil and make the proper adjustments.

When the paper stops feeding on the Heidelberg windmill list the items you should check to remedy the problem.

When the paper stops delivery properly list the items you would check to remedy the problem.

When the stitch legs are overlapping what would you do to remedy the problem?

F. **TEXTS AND OTHER READINGS (TYPICAL)**


III. **DESIRED LEARNING**

A. **COURSE GOAL**

As a result of satisfactory completion of this course, the student should be prepared to:

Perform all bindery operations with limited assistance in the Print Shop. Bindery operations include: Cutting, Folding, Stitching, Drilling, Binding (coil, comb, thermo binding), scoring, perforation, die cutting, foil stamping, embossing, numbering, and padding. Students will also have an excellent understanding of paper.

B. **STUDENT LEARNING GOALS**

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**

   Upon satisfactory completion of this course, the student will be able to:
   
   a. Fundamentals of Bindery Operations
   b. Match a list of binding and finishing operations with brief descriptions of final format requested.
   c. Compare a list of binding and finishing operations to the equipment requirements.
   d. Assemble and label dummies for multiple page products.
   e. Demonstrate knowledge of procedures used to determine the grain direction of different types of paper.
   f. Identify paper samples by name when given a list of common papers and samples of each.
   g. Identify and describe various finishing operations and the equipment required to perform: scoring, perforating, numbering, punching, die-cutting, foil stamping, and embossing.
   h. Demonstrate knowledge of paper calculations, job docket preparation/processing, and
estimating. Including, estimating of entire job in paper, etc.

i. Cut paper and fold paper to job specifications.

j. Feed paper and score, perforate, and number on specialty presses for bindery.

k. Demonstrate the procedure used in the adjustment of feeders, feed board, and delivery systems.

l. Set up and fold Letter folds, Accordion, and half, in a three hour lab.

m. Set up and position foil stamping to the required location and establish proper impression and heat settings.

n. Set up and position embossing for tight registration to the foil stamping in the previous lab.

o. Set up and die cut boxes on the heidelberg windmill.

p. Perform parallel and right angle folds for 8 and 16 page signatures.

2. **Lab Learning Goals**

   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Operate table top and floor model folders, and perform parallel and right angle folds.

   b. Perform the following skills on the Heidelberg windmill: Score, perforate, die cut, number, foil stamp and emboss.

   c. Calculate and cut multiple cut projects from parent size sheets and finished press size sheets. Also to program the cutter for lab assignments.

   d. Set up and stitch both side and saddle stitched assignments to include changing wire sizes.

   e. Perform all functions on the drill: Sharpening bits, locating drill holes for specific jobs, and setting up and using the round corner function.

   f. Specialty scoring and perforation equipment set up and operation.

   g. perform all binding techniques: Fan Apart adhesive, padding, thermal binding, and coil binding.

   h. Set up and run the rewind equipment for the flexographic printing roll stock.

### IV. **METHODS OF ASSESSMENT (TYPICAL)**

**A. FORMATIVE ASSESSMENT**

1. Demonstrated skill performance

2. Descriptive lab analysis

3. Group task analysis/troubleshooting

4. Problem-solving techniques

5. Product mockup creation

6. Small group class presentations.

7. Task performance ratings
8. Written examinations to include essays

9. Written systems diagnosis/recommendations

B. **SUMMATIVE ASSESSMENT**

1. Final Written test

2. Lab finals on specific equipment for acquired skill level.

3. Mid Term written test