COURSE INFORMATION FORM

DISCIPLINE: Graphic Design  
COURSE TITLE: Computers in Design I

CR.HR  3  LECT HR.  1  LAB HR.  5  CLIN/INTERN HR.  _______  CLOCK HR.  _______

CATALOG DESCRIPTION
Introduction to the computer as a design tool utilizing layout, drawing, and image-editing software. Students will learn how to use the software to design layouts, create graphics, format type, and prepare imagery for the production of Graphic Design projects. Students will also be introduced to the design principles which guide good design structure. Photoshop, Illustrator, and InDesign are the software applications used.

PREREQUISITES
None

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:

1. Identify the role of graphic design in society and how computers can be used in the creative process.
2. Define the elements and principles of organization/design and identify their presence in graphic designs.
3. Demonstrate competency in the use of design applications and software while producing layouts, graphics, and preparing images for layout, according to the standards of the design field; using layout, drawing, and image-editing applications.
4. Use appropriate terminology to analyze and critique works created by student, peers, and external references.

GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

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<th>Outcomes</th>
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Revised 12/11/13
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Demonstrate the ability to learn and apply required software and technical tools according to industry standards.
2. Apply technical skills and critical thinking skills to solve visual communication problems.
3. Work with others by engaging in collaborative efforts to solve design problems and manage projects.
4. Demonstrate effective time management and communication skills – both written and oral.
5. Demonstrate professional ethics, apply effective business practices and project management skills.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Evaluations will be based on project assessments, skills testing, written and oral exams, relating to software use and the creation of graphic designs. (ESO#1,2,3,4,5)
2. Student activity and works produced will be analyzed during the class period to assess the level of student involvement in and understanding of the graphic design processes. (ESO#1,2,3,4,5)
3. Classroom critiques will be facilitated to assess conceptual and practical understanding of graphic design processes, design principles, design aesthetics, and the student’s ability to establish critical criteria for judgment and revision. (ESO#2,3,4,5)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Hardware Introduction
   A. Student Workstation
      1. Monitor, CPU, Storage Drives, CD’s
      2. Input Devices
      3. Mouse
      4. Tablets
      5. Login and Access
   B. Peripheral Equipment
      1. Printers
      2. Scanners
      3. Cameras
   C. Utilizing the hardware
      1. Creating files
      2. Saving
      3. Printing
      4. Retrieving

II. Software—General:
   Basic mastery of industry-standard drawing software, image-editing software, layout software
   A. Tools
   B. Palettes
   C. Layers—options and organization
   D. File formats—types and use
   E. Outputting
   F. Interfacing with multiple programs

III. Design
   A. Principles of organization/design
      1. Contrast/Variety
      2. Rhythm/Movement
      3. Balance
      4. Dominance/Emphasis
      5. Proportion/Scale
      6. Harmony
      7. Economy
      8. Unity
   B. Drawing software — Adobe Illustrator
      1. Vector vs. Bitmap
      2. Work space
      3. Pen tool
      4. Shapes
a. Open paths  
b. Closed paths
5. Stroke & Fill  
6. Editing shapes, strokes, paths  
7. Clipping masks*  
8. Blending  
9. Type  
a. Type containers  
b. Type on path  
c. Type in area  
d. Create outlines  
10. Painting tools  
a. Brush  
b. Gradients  
c. Mesh  
11. Filters  
12. Importing files  
13. File setup for use in other design applications  

C. Image-editing software – Adobe Photoshop  
1. Workspace  
2. Image size & resolution  
3. Color  
a. Mixing Colors & Swatches  
b. Models/modes  
4. Importing images  
5. Retouching*  
6. Selecting tools  
7. Layers and organization  
8. Layer options & styles*  
9. Painting & drawing*  
10. Patterns & fills*  
11. Filters*  
12. Clipping Paths—COBs (Cut Out Background) for layout  
13. Saving & Exporting for use in other design applications  

D. Software used for Layout – Adobe InDesign  
1. Workspace  
2. Page setup  
3. Containers for text and images  
a. Importing text  
b. Importing images  
4. Type formatting  
a. Character palette  
b. Paragraph palette  
c. Line spacing/Leading  
d. Word spacing/Kerning/Tracking  
e. Text flow across pages  
5. Layers and organization of elements  
6. Margins and Guides  
7. Multiple-page documents—Pages & Spreads  
8. Grids & Columns  
9. Creating and applying color  
10. File preparation for output/printing  

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a. File management/organization
b. Collect images
c. Collect fonts
d. Preflight – color modes, broken links

E. Color
   1. Color palettes
   2. Color models/modes & Gamuts
   3. Spot color—Pantone
   4. 4/Color (process) color
   5. Color separations
   6. Color output—issues in production

F. Typography
   1. Fonts, families
   2. Type tools in software used
      a. Character formatting
      b. Paragraph formatting
   3. Applying color
   4. Visual hierarchy
   5. Readability
   6. Collect fonts for output

IV. Studio skills
    A. Presentation
    B. T-square/metal straight-edge
    C. Cutting tools
    D. Matting/mounting

V. Critical Thinking
   A. Generating a concept
   B. Illustrating a concept
   C. Working within a team/collaborative
   D. Production of a concept
   E. Analyzing and critiquing concepts and execution