# COURSE SYLLABUS

**Course Title:** Digital Imaging  
**Department:** Art  
**Curriculum:** Graphic Design  
**Date submitted:** May 2019  
**Course Code:** GRA*231  
**Course Type:** Z

## Course Descriptors:
Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

### Prerequisites:
C- or better in Design Principles (GRA*101) AND Introduction to Computer Graphics (GRA*110)

### Corequisites:
None

### Elective Type:
FA/LAS

### Credit Hours:
3

### Developmental:
No

### Lecture:
2

### Clinical:
0

### Lab:
0

### Studio:
2

### Other:
0

### Contact Hours:
4

### Class Maximum:
20

### Semesters Offered:

---

## Catalog Course Description:
This course focuses on the continued use of digital imagery in art and design, by furthering a student’s skill in the use of raster image (Adobe Photoshop), and scanning software. The course goes beyond the basic techniques covered in Introduction to Computer Graphics, exploring more advanced electronic image creation and manipulation techniques, and addresses some of the technical issues facing a computer artist and designer.

## Topical Outline:
List course content in outline format.

1. **The computer as a visualization tool**
   - Traditional vs. computer graphics techniques
   - Choosing the right software program

2. **The design process**
   - Thumbnails, comps, presentation, criticism, evaluation, refinement, and production

3. **File storage and retrieval considerations**
   - Storage mediums
B. Network servers and navigation
C. Personal file system
D. Backup and master file strategy

4. Computer image output
   A. Quality
   B. Resolution
   C. Vector vs. raster
   D. Black and white
   E. Color
   F. Inconsistencies between screen image and final output

5. Image scanning
   A. Evaluating images
   B. Determining scanning resolution
   C. Line art/grayscale/color
   D. File size and storage issues
   E. Other sources for image acquisition
   F. Copyright issues

6. Color models
   A. RGB
   B. CMYK
   C. Pantone
   D. Color gamet

7. Image modes
   A. Bitmap
   B. Greyscale
   C. Duotone
   D. RGB
   E. CMYK

8. Review of Adobe Photoshop techniques for image creation and manipulation
   A. Image selection techniques (basic)
   B. Working with layers and basic composite image controls (transparency)
   C. Image retouching (basic)
   D. Image size, resolution, and canvas adjustments

9. Intermediate/Advanced Adobe Photoshop techniques for image creation and manipulation
   A. Selection techniques
      1. Lasso
      2. Wand
      3. Pen
      4. Saving/loading selections
      5. Other selections techniques
   B. Transformations (scale, etc.)
   C. Painting tools and protective masks
D. Layers
   1. Pixel blending
   2. Layer masks
   3. Vector masks
   4. Adjustment layers
   5. Layer styles
   6. Other layer controls
E. Paths (pen tool)
F. Vignettes
G. Color correction
H. Retouching and cloning
I. Image adjustments
   1. Levels
   2. Curves
   3. Color balance
   4. Brightness/contrast
   5. Hue/saturation
   6. Colorize
   7. Posterize
J. Duotones
K. Filters and effects
L. Gradients
M. Text input
N. Graphic drawing tools
O. Combining Illustrator and Photoshop

10. Image composite techniques
    PROJECT – text and image montage – illustration of a phrase

11. Filters and effects
    PROJECT – digitally altered self portrait

12. Text, shape, and layout
    PROJECT – TV sports graphic

13. Copyright laws and how they apply to art and design

14. Portfolio presentation

NOTE: Projects listed to address particular topics are suggestions, not mandated.

**Outcomes:**

Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.

**Upon successful completion of this course, the student will be able to do the following:**

**COURSE:**

Through a series of lectures, demonstrations, and projects, students will learn and apply the concepts and techniques for creating raster-based imagery. Depending on level of successful completion of the course, students will be able to analyze a visual communication problem, develop a concept, and create and successfully output a well designed and technically accurate image-based design solution using image scanning, and digital imaging software — specifically Adobe Photoshop. In this effort, students will:
1. Acquire advanced knowledge of the creative uses of raster image creation through analysis and critique of existing raster images, and the design and creation of original raster image based visual communications pieces.

2. Acquire advanced skills in the use of the tools and techniques available in a raster image software program — Adobe Photoshop, so as to be able to design and execute raster image art and design.
   a. Learn and apply techniques for the image retouching, and color correction.
   b. Learn and apply techniques for the creation of image montages using masks and composite controls.
   c. Learn and apply techniques for the creation of stylized images using filters and effects.
   d. Learn and apply techniques for the creation of painted digital imagery.

3. Learn and apply the color models and modes used in raster art and design creation.

4. Demonstrate the development of visual and conceptual skills required to create a successful design solution through the process of idea development, refinement, and assessment in the creation of design projects.

5. Effectively communicate an understanding of design concepts, processes, and techniques, using the “language” of design.

6. Present a portfolio of work showing knowledge and application of concepts, processes, and techniques presented during the course.

**PROGRAM:** (Numbering reflects Program Outcomes as they appear in the college catalog)

Depending upon level of successful completion of coursework within the program, students will - at the intermediate level:

**VISUAL LITERACY AND CREATIVE EXPRESSION**
2. Identify and apply the design principles to control aesthetic and compositional elements in the creation of visual solutions to art and design problems.

3. Demonstrate the development of visual and conceptual skills required to create a successful design solution through the process of idea development, refinement, and assessment in the creation of design projects.

**VISUAL COMMUNICATION, CONCEPTUAL AND CRITICAL THINKING**
4. Understand the function and impact of design, and the role of the design profession in our society.

5. Be able to analyze a visual communication problem, develop visual concepts, and create design...
solutions that respond to client and audience needs through symbol and image creation, graphic illustration, paper selection, color, typography, and page composition.

6. Effectively communicate an understanding of design concepts, processes, and techniques using the “language” of design.

MEDIA AND TECHNICAL SKILLS
8. Acquire skills in the use of image scanning, page layout, and vector and raster image software programs so as to be able to design and execute graphic symbols and illustrations, raster images, and page compositions incorporating typography and image.

PROFESSIONAL PRACTICE
10. Understand project management, marketing, and business related responsibilities of a graphic designer (and interactive design in Interactive Media option) in the design and production of visual communication pieces, the necessity of participating in a collaborative work environment, and adhering to professional ethical standards.

11. Demonstrate knowledge of design project goals, be able to set priorities to meet milestones for project completion, and show the ability to revise and refine designs based on ongoing evaluation.

12. Present design solutions and portfolio, in a manner suited to professional presentation showing knowledge and application of the concepts, skills, and techniques presented in courses during the program.

GENERAL EDUCATION: (Numbering reflects General Education Outcomes as they appear in the college catalog)
1. Aesthetic Dimensions - Students will understand the diverse nature, meanings, and functions of creative endeavors through the study and practice of literature, music, the theatrical and visual arts, and related forms of expression.
   
   **Demonstrates:** Identifies and describes formal aspects, historical or cultural context, and aesthetic elements of the genre with clarity and appropriate vocabulary.

   **Does Not Demonstrate:** Unable to clearly identify and describe the formal aspects, historical context, and aesthetic elements of the genre.

**Assessment will be based on the following criteria:**
A student’s creative ability, knowledge of design issues, technical skills, quality of execution, and presentation of work as determined through:
1. Studio classwork
2. Projects
3. Individual and group critiques/discussions
4. Portfolio review of work completed during the semester
5. Option of quizzes/exams/papers/reports/presentations as determined by the instructor

**Instructional Resources:**
1. 20 student Macintosh computer workstations with color monitor/digitizing tablets/keyboard/mouse/color flatbed scanners, with current version of Macintosh OS and utility software.
2. Instructor workstation with permanently attached color projection system
3. Computer network (Ethernet 10BaseT min.) with file server setup for student and instructor storage, and print spooling
List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.

| 5. Letter and tabloid size black & white, and color Postscript laser printers |
| 6. Large format color Postscript inkjet printers |
| 7. Permanently mounted 35mm slide projector |
| 8. 35mm slide scanner |
| 9. Paper cutters and light tables |

Desired:

**Textbook(s)**

Visual Quick Start Guide—Photoshop. PeachPit Press