

# COURSE SYLLABUS

<b>Course Title:</b>	Introduction to Computer Graphics	<b>Date submitted:</b>	Spring 2014 (AAC: 14-23)	
<b>Department:</b>	Art			
<b>Curriculum:</b>	Graphic Design			
<b>Course Descriptors:</b> Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	<b>Course Code:</b> (eg. ACC 101)	GRA*110	<b>Prerequisites:</b>	
	<b>Course Type:</b>	Z		None
	A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: M: Seminar Internship P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/Clinical/Lab Z: Combined Lecture/Studio			
	<b>Elective Type:</b>	FA/G/LAS		
	AH: Art History E: English FA: Fine Arts FL: Foreign Language G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math S: Science SS: Social Science			
	<b>Credit Hours:</b>	3	<b>Corequisites:</b>	None
	<b>Developmental:</b> (yes/no)	No		
	Lecture:	2		
	Clinical:	0		
	Lab:	0		
Studio:	2			
Other:	0			
<b>Contact Hours:</b>	TOTAL:			
	<b>Class Maximum:</b>	20	<b>Other Requirements:</b>	
	<b>Semesters Offered:</b>			None
<b>Catalog Course Description:</b>	An introduction to the computer as a graphic design and artist's tool. Using Macintosh OS, students learn basic use and application of vector illustration (Adobe Illustrator), raster image (Adobe Photoshop), and scanning software programs to the art and design process. Emphasis is on "hands on" use of the computer, and how the computer can aid the artist's and designer's problem solving process through interactive visual alternatives.			
<b>Topical Outline:</b> List course content in outline format.	1. Overview of kinds of software used for electronic image creation and manipulation <ul style="list-style-type: none"> <li>A. Vector drawing</li> <li>B. Image manipulation</li> <li>C. Paint</li> <li>D. Image scanning</li> <li>E. Page layout</li> <li>F. 2/3D animation</li> <li>G. 3D modeling</li> <li>H. Presentation graphics</li> <li>I. Interactive media</li> </ul>			

- J. Web design
- 2. File storage and retrieval considerations
  - A. Storage mediums
  - B. Network servers and navigation
  - C. Personal file system
  - D. Backup and master file strategy
- 3. Macintosh OS
  - A. Starting up and shutting down
  - B. Desktop/finder
  - C. Icons
  - D. Menus and windows
  - E. Dialog boxes
  - F. Opening and closing software applications
  - G. Creating a file
  - H. Saving/copying files
  - I. File management
  - J. Printing
  - K. Inserting and ejecting media
  - L. Shutdown
- 4. The computer as a visualization tool
  - A. Traditional vs. computer graphics techniques
  - B. Choosing the right software program
- 5. Computer image output
  - A. Quality/resolution
  - B. Vector vs. raster
  - C. Black and white
  - D. Color
  - E. Inconsistencies between screen image and final output
- 6. Adobe Illustrator – vector/Postscript drawing
  - A. Overview of the use of vector graphics
  - B. Introduction of Illustrator tools and menu options
  - C. Tutorials of Illustrator techniques
  - D. Application of learned techniques in creative project
- 7. Color models and systems
  - A. RGB/HLS/CYMK
  - B. Pantone or equivalent
- 8. 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
- 9. Adobe Photoshop – paint and image manipulation
  - A. Overview of the use of raster images
  - B. Introduction of Photoshop tools and menu options
  - C. Tutorials of Photoshop techniques
  - D. Application of learned techniques in creative project
- 10. Working between Adobe Photoshop and Adobe Illustrator
- 11. Portfolio presentation

**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 basic concepts and techniques for creating vector and raster imagery. Depending on level of successful completion of the course, students will obtain a working knowledge of Macintosh OS, and be able to conceptualize and execute basic visual designs using vector drawing (Adobe Illustrator), raster imaging (Adobe Photoshop), and image scanning software applications. In this effort, students will:

1. Acquire basic skills in the use of the tools and techniques available in a vector drawing software program — Adobe Illustrator, so as to be able to design and execute vector graphic symbols and illustrations.
2. Acquire basic 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 imagery.
3. Demonstrate an understanding of the color models used in the creation of digital art and design.
4. Be able to scan, and import line art, grey scale, and color images.
5. Choose software appropriate for the creation of visualized digital art and design.
6. Understand and choose file formats appropriate for digitally created art and design.
7. Be literate in the Macintosh OS, file storage and retrieval, network and file server navigation, and the output of digital images and designs to a variety of digital output devices.
8. 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.
9. Effectively communicate an understanding of design concepts, processes, and techniques, using the “language” of design.
10. Present a portfolio of work showing knowledge and application of concepts, processes, and techniques presented during the course.

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

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

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	<p>Depending upon level of successful completion of coursework within the program, students will - at the beginner level:</p> <p><b>MEDIA AND TECHNICAL SKILLS</b></p> <p>7. Gain competence in the Macintosh OS, file storage and retrieval, network navigation, and the output of digital images and designs.</p> <p>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.</p> <p><b>PROFESSIONAL PRACTICE</b></p> <p>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.</p>
	<p><b>GENERAL EDUCATION:</b> <i>(Numbering reflects General Education Outcomes as they appear in the college catalog)</i></p> <p>1. <b>Aesthetic Dimensions</b> - 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.</p> <p style="padding-left: 20px;"><b>Demonstrates:</b> Identifies and describes formal aspects, historical or cultural context, and aesthetic elements of the genre with clarity and appropriate vocabulary.</p> <p style="padding-left: 20px;"><b>Does Not Demonstrate:</b> Unable to clearly identify and describe the formal aspects, historical context, and aesthetic elements of the genre.</p>
<p><b>Evaluation:</b> List how the above outcomes will be assessed.</p>	<p><b>Assessment will be based on the following criteria:</b></p> <p>A student's creative ability, knowledge of design issues, technical skills, quality of execution, and presentation of work as determined through:</p> <ol style="list-style-type: none"> <li>1. Studio classwork</li> <li>2. Projects</li> <li>3. Individual and group critiques/discussions</li> <li>4. Portfolio review of work completed during the semester</li> <li>5. Option of quizzes/exams/papers/reports/presentations as determined by the instructor</li> </ol>
<p><b>Instructional Resources:</b> 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.</p>	<p>Required:</p> <p>Graphic Design studio</p> <ol style="list-style-type: none"> <li>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.</li> <li>2. Instructor workstation with permanently attached color projection system</li> <li>3. Computer network (Ethernet 10BaseT min.) with file server setup for student and instructor storage, and print spooling</li> <li>4. Software used in the course – Adobe Illustrator, Adobe Photoshop, Adobe InDesign, Adobe Dreamweaver, Adobe Flash (current versions)</li> <li>5. Letter and tabloid size black &amp; white, and color Postscript laser printers</li> <li>6. Large format color Postscript inkjet printers</li> <li>7. Permanently mounted 35mm slide projector</li> <li>8. 35mm slide scanner</li> </ol>

	9. Paper cutters and light tables Desired:
<b>Textbook(s)</b>	Visual Quick Start Guide—Illustrator. PeachPit Press Visual Quick Start Guide—Photoshop. PeachPit Press