Common Course Outline
MULT 121
Graphics for Multimedia
3 Semester Hours

The Community College of Baltimore County

Description

MULT 121 – 3 Credits – Graphics for Multimedia introduces cross-platform software to create images, logos, backgrounds, control buttons, and interfaces for digital display in multimedia and internet applications. Image-editing is explored using the extensive capabilities of industry-standard image manipulation software. Students work individually and in teams to create original artwork and recognize, discriminate, and create effective file formats from both raster and vector images, and for specific purposes. Students learn correct image processing and format to create an electronic portfolio in any presentation, html, or authoring application.

3 credits; 2 lecture hours per week; 2 laboratory hours

Prerequisite: CGVC 102 or ARTS 102 or consent of the program coordinator

Overall Course Objectives

Upon successfully completing the course students will be able to:

1. used design concepts and apply them in critiques;
2. identify current technologies and processes for digitizing images;
3. use hardware and software for digitizing images;
4. use software to make detailed raster based selections;
5. identify color palettes and color modes and methods for adjusting colors;
6. use software to reformat size and file formats of raster based images;
7. identify and use vector based editing tools;
8. compare and contrast vector and raster based images;
9. create appropriate images for the internet and multimedia applications;
10. discuss copyright issues related to original works of art;
11. import graphics into multimedia packages;
12. apply team concepts in to the development of corporate style projects;
13. develop graphical interfaces for multimedia use; and
14. present and discuss personal achievements.

Major Topics

I. Introduction to digital imaging
    a. Image sources and new technologies

b. Image production software

II. Introduction to digital media
    a. Digital Cameras
    b. Flatbed and Film Scanners
    c. Internet and CD resources
    d. Color sampling, dynamic range, and image interpolation

III. Raster Based software basics
    a. Graphical user interfaces
    b. Keyboard shortcuts
    c. Tools, Palettes, and menus

IV. Raster Manipulation
    a. Making basic pixel selections
    b. Using layer to composite and organize image development
    c. Applying image filters and styles to create effects

V. Introduction to Vector based graphics
    a. Vector based file formats
    b. Advantages of vector formats
    c. Vector based images software

VI. Vector based graphic software basics
    a. Illustrating with points and paths
    b. Using Bezier curves
    c. Using pathfinders, align, and distorts.

VII. Work in teams to create graphics to support corporate style multimedia projects.
    a. Managing time in image development
    b. Develop graphics to meet specific content needs
    c. Communicate with a team to develop unified graphic products
    d. Identify ethics and copyright law in image development for published media.

VIII. Raster based file formats and image management
    a. Pixels per inch/aspect ratio
    b. Color modes
    c. Compression: JPEG, PNG, BMP, PSD, TIFF, and RAW
    d. Exporting
    e. Rasterizing

IX. Vector Based file formats
    a. Scaling images
    b. AI, EPS, PDF
    c. Exporting
    d. Tracing

X. Raster and Vector Text
    a. Text warping
    b. Creating outlines from text
    c. Text along a path
    d. Text in a field
    e. Text justification
    f. Text as masking

XI. Intermediate Raster based editing tools
    a. Brushes and pencils
    b. Cloning and healing
    c. Burning and dodging
    d. Gradients

XII. Intermediate Vector Based editing
    a. Joining, Aligning, and compounding

b. Pathfinders

XIII. Using a combination of software packages
   a. Transporting, importing, and exporting images
   b. Creating personal digital portfolio assets
   c. Creating an interface for digital portfolio

XIV. Graphics for internet and multimedia
   a. Slicing images
   b. Exporting/Optimizing for web and multimedia use

XV. Interface and Portfolio development
   a. Reformatting size and formats of personal works
   b. Importing various graphics into a single authoring, web, or presentation system
   c. Describing processes for creating works
   d. Defining and correctly using vocabulary
   e. Group critique and self assessment

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

4 Computer projects:
1 Project where students will work in teams to produce corporate-styled projects
2 Tests, exams, and/or quizzes:
Comprehensive Final Exam, may include a final project and presentation

Other Course Information

This course is a course in Simulation and Digital Entertainment (SDE), Multimedia Technology and Web Technology.

This course is taught in a computerized environment.

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common Course Outline.

Date Revised: 05/11/06