Common Course Outline
CGVC 101
Introduction to Computer Graphics
3 Semester Hours

The Community College of Baltimore County

Description

Introduction to Computer Graphics
Introduces fundamental software used in computer graphic design including the user interface and operating system, navigation, file organization, use of a file server, and scanner; emphasizes basic design skills while learning design software, experimentation and creative solutions to design problems.
3 credits; 3 lecture hours per week. Credit for equivalent experience is available. Students seeking credit must present a portfolio demonstrating a knowledge comparable to CGVC 101 course objectives.
Prerequisite: Exemption from or successful completion of (RDNG 052 or LVR 2)

Overall Course Objectives

Upon successful completion of the course the student should be able to:
1. Define and use common terms relating to computer graphics hardware and software;
2. Identify and be able to use the major features of the operating system graphical user interface;
3. Demonstrate a basic knowledge of working with removable storage;
4. Work from a file server to create and manage files;
5. Demonstrate a working familiarity with the tools and functions of a professional paint/image-editing program;
6. Demonstrate a working familiarity with the tools and functions of a professional draw/vector-based program;
7. Explain the difference between raster and vector-based graphics;
8. Use basic word processing capabilities, including setting up documents, setting margins, choosing fonts and type sizes, editing text, formatting, and using tabs, columns, line spacing, borders, and rules;
9. Set up style sheets and understand their purposes;
10. Demonstrate an understanding of the concept of thumbnail sketches;
11. Demonstrate a working familiarity with a page assembly program and its functions, including importing text and graphics to produce a publication;
12. Use a scanner;
13. Demonstrate an understanding of the different graphic file formats and their uses;
14. Explain the different functions of the CMYK and RGB color modes;
15. Demonstrate an understanding of bit depth and resolution;

Major Topics

A. Understanding the user interface and the operating system
    1. Navigating the desktop
    2. Working from a file server
B. Organizing files
    1. Creating and saving files
    2. Using the principles of hierarchical organization
C. Defining the stages of the design process

1. Working with thumbnails, roughs, and comps
2. Understanding their use in solving design problems

D. Working with a scanner
1. Optimum settings
2. File formats

E. Working with a vector/draw program
1. Defining vector-based graphics
2. Using the tools and palettes
3. Working with different views
4. Creating and editing type
5. Creating templates in a vector/draw program
    a. Importing scanned artwork
    b. Using bezier curves and the pen tool
    c. Understanding paths
    d. Working with layers

F. Working with a raster/paint program
1. Defining raster-based graphics
2. Defining color modes
3. Understanding bit depth and image resolution
4. Using the basic tools and palettes
5. Making selections and applying filters
    a. Using the selection tools
    b. Defining anti-aliasing and feathering
    c. Working with types of filters
6. Importing and saving images
    a. Resizing an image
    b. Adjusting brightness and contrast
7. Using layers and channels
    a. Creating, moving, and editing layers
    b. Using layer modes
    c. Saving selections as channels

G. Working with a layout and design program
1. Using the basic tools and palettes
2. Navigating within the program
3. Working with text and graphics
    a. Inputting, flowing, and formatting text
    b. Using style sheets
    c. Working with a font management program
    d. Importing, sizing, and positioning graphics
4. Designing a page layout

Course Requirements

1.Complete all assignments in a manner that is clean, neat, well presented, and tasteful.
2.Come to class on time and hand in all projects when they are due. Any work handed in late will receive a lower grade, unless an extenuating circumstance is allowed by the instructor.
3.Take responsibility for finding out about missed assignments. Take a classmate's phone number down. Follow the syllabus and handouts.
4.Read all textbook assignments and handouts in the week they are assigned.
5.Revise any assignment as required. Revision is a necessary part of the learning process for this course. When revisions are required, they will be part of the grade for the assignment.
6.Bring supplies and equipment to class each session and work in class on their projects.

7.Keep copies of their work. Since there is no guarantee for the safe travel of an assignment and no way to determine the fate of a missing one, the burden is on the student to keep a backup copy on removable media.
8.Maintain a digital folder of all projects, to be collected by the instructor for assessing the final grade.
9.Abide by the Code of Conduct set forth in the college catalog (College Regulations, Section Four).

Other Course Information

CGVC 101 is a required course for the Computer Graphics and Visual Communication Publication Design degree options and certificates.

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

The Community College of Baltimore County is committed to providing a high-quality learning experience that results in growth in knowledge, attitudes, and skills necessary to function successfully as a transfer student, in a career and as a citizen. To accomplish this goal, we maintain high academic standards and expect students to accept responsibility for their individual growth by attending classes, completing all homework and other assignments, participating in class activities and preparing for tests.

We take seriously our responsibility to maintain high-quality programs and will periodically ask you to participate in assessment activities to determine whether our students are attaining the knowledge, attitudes and skills appropriate to various courses and programs. The assessment activities may take many different forms such as surveys, standardized or faculty-developed tests, discussion groups or portfolio evaluations. We ask that you take these activities seriously so that we can obtain valid data to use for the continuous improvement of CCBC's courses and programs.

06/01/00