

ARTD 116

Digital Imaging I

3 Credits: (2 hours lecture, 3 hours lab)

Community College of Baltimore County
Common Course Outline

Description

ARTD 116 – Digital Imaging I: is a course that teaches the skills required for creating, manipulating, and publishing digital images for both print and screen media. The course includes extensive use of raster editing software for compositing, manipulating, and executing creative graphics. Emphasis is placed on output for professional design.

Co-requisites: ARTD 110 or permission of program coordinator

Overall Course Objectives

Upon completion of this course, students will be able to:

1. effectively modify pixel and color resolution;
2. optimize image quality for a variety of outputs;
3. identify methods and sources for acquiring assets;
4. manipulate images from a variety of sources;
5. differentiate between image formats;
6. practice effective non-destructive editing;
7. perform intricate image editing techniques;
8. modify color properties;
9. apply design principles and Gestalt theory to image creation;
10. use the design process to develop a concept; and
11. abide by copyright law.

Major Topics

- I. Resolution Pixel Per Inch/Dots Per Inch (PPI/DPI) Standards for professional output
 - a. PPI/DPI
 - b. Standards for professional output
 - c. Raster vs. vector graphics
- II. Color
 - a. Color bit depth
 - b. RGB (Red Green Blue) and CMYK (Cyan Magenta Yellow Key) color spaces
 - c. Editing color properties
- III. Compression Schemes
 - a. Uncompressed editing file types and portable file formats
 - b. Lossless compression formats/schemes
 - c. Lossy compression formats/schemes
 - d. Comparison of file formats and uses
- IV. Digital Image Acquisition

The Common Course Outline (CCO) determines the essential nature of each course.

For more information, see your professor's syllabus.

- a. Digital camera images
 - b. Scanned media
 - c. File formats and metadata
 - d. Stock imagery
 - e. Copyright and licensing
- V. Selections
- a. Make intricate selections
 - b. Use color properties to make selections
 - c. Modify selections
- VI. Non-Destructive editing
- a. Layers
 - b. Smart objects
 - c. Masks
 - d. Smart filters
 - e. Layer styles/effects
 - f. Blending options and transparency
 - g. Adjustment layers
- VII. Brushes
- a. Basic brush uses
 - b. Custom brushes
 - c. Brush settings
 - d. Importing and exporting
- VIII. The Design Process
- a. Brainstorming and ideation
 - b. Critiquing work for effectiveness
 - c. Gestalt theory
 - d. Refining and developing visuals
 - e. Output for final production
- IX. Retouching
- a. Patching and cloning
 - b. Healing tools
 - c. Removing and repairing

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- four multi-week projects
- six in-class and/or take-home exercises

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

Date Revised: 11/21/2023

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