

VCPH-1450: DIGITAL IMAGING I

Cuyahoga Community College

Viewing: VCPH-1450 : Digital Imaging I

Board of Trustees:

November 2018

Academic Term:

Fall 2020

Subject Code

VCPH - VC-Photography

Course Number:

1450

Title:

Digital Imaging I

Catalog Description:

Introduction to technical and aesthetic fundamentals of digital image manipulation using the most current computer software and hardware systems for the input, modification and output of digital photographs.

Credit Hour(s):

3

Lecture Hour(s):

2

Lab Hour(s):

3

Requisites

Prerequisite and Corequisite

VC-1000 Visual Communication Foundation or concurrent enrollment; or FILM-1180 Introduction to Film and Media Arts, or concurrent enrollment.

Outcomes

Course Outcome(s):

Effectively combine, modify and analyze photographic information to create composited images and photo illustrations.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Discuss the principles, concepts, and terminology used in digital photographic imaging.
 2. Discuss the legal and ethical issues inherent in digital imaging.
 3. Demonstrate facility with the hardware, software, and equipment currently used in photographic digital imaging.
 4. Use Adobe Photoshop and Bridge software to view and edit digital files.
 5. Use Adobe Photoshop to composite various black and white digital files into a composite.
 6. Scan photographs to create specifically sized digital files.
 7. Restore old or damaged photographs to closely resemble their original state.
 8. Combine and color balance multiple digital files into a seamless composite.
 9. Create a themed digital photo illustration.
 10. Examine a digitally composited work piece and be able to articulate its technical and aesthetic strengths and weaknesses.
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Methods of Evaluation:

1. Multi-layered digital files submitted for all assignments
2. Written instructor response
3. Verbal instructor response
4. Group Critique and discussion of assignment results

Course Content Outline:

1. Digital imaging concepts
 - a. Raster vs. vector graphics
 - b. Bits, bytes, kilobytes, megabytes, gigabytes
 - c. Pixels, bit depth and color capability
 - d. File Size
 - e. Resolution
 - f. File formats
 - g. Digital color
 - i. color monitors
 - ii. color space models
 - iii. color output options
 - iv. color management
2. Digital photographic tools
 - a. Hardware systems for input, modification, storage and output of photographic images
 - b. Software systems for input, modification and editing of digital files
 - c. Use and operation of hardware and software for the input, modification, storage and output of digital photographs
3. Business Practices
4. Scanning essentials
 - a. Analog of digital conversion
 - b. Types of scanners
 - c. Operation of scanners
 - d. Tonal and contrast control
5. Output considerations
 - a. resolution and file size
 - b. scale
 - c. color management
6. Image editing and modification
 - a. Raster image structure and characteristics
 - b. Compositing techniques
 - i. selection and masking techniques
 - ii. resolution and scale considerations
 - iii. Retouching and image enhancement techniques
 - c. Image manipulation techniques
 - i. filters
 - ii. paint techniques
1. Digital color
 - a. Color space models
 - b. Hue, saturation, luminance
 - c. Color mixing
 - d. Image editing and color correction
 - e. Color calibration
 - f. Color conversion
 - g. Color management
2. Digital output options
 - a. Characteristics of output devices
 - b. Preparing files for proper output

Resources

McClelland, Deke. *MacWorld Photoshop 6 Bible*. Forest City: IDG, 2002.

Conrad Chavez. *Real World Adobe Photoshop CS5 For Photographers*. 1st. Berkeley, CA: Peachpit, 2011.

Evening, Martin. *The Adobe Photoshop CC for Photographers: A Professional Image Editor's Guide to the Creative Use of Photoshop for the Macintosh and PC*. 1st. Burlington, MA: Elsevier Ltd, 2015.

Ctein. *Digital Restoration From Start To Finish*. 3rd ed. Burlington, MA: Focal Press/Elsevier, 2016.

"Photoshop User"

Resources Other

1. Moughamian, Dan. Adobe Digital Imaging How To's. Berkely, CA: Adobe Press/Peachpit, 2011. Handouts covering technical principles and procedures.
2. <http://www.martinevening.com/>
3. <http://www.lynda.com/>, (<http://www.lynda.com/>) 2018.
4. Photoshop Tutorials <http://psd.tutsplus.com/>, 2018.
5. <http://photoshopninja.com/> *Photoshop Ninja, Expert Photoshop tips and tricks for designers and photographers since 2005*.
6. Photoshop User magazine
7. Digital PhotoPro magazine
8. DVDs from VISCOM library.
9. Tri-C library/OhioLink
10. Lab facilities: digital photographic lab, computer workstations.

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