CS 70.12 Course Outline as of Fall 2023

CATALOG INFORMATION

Dept and Nbr: CS 70.12 Title: PHOTOSHOP ADV CONCEPTS
Full Title: Photoshop Advanced Concepts
Last Reviewed: 3/13/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	4.00	Lecture Scheduled	4.00	17.5	Lecture Scheduled	70.00
Minimum	4.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	4.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 140.00 Total Student Learning Hours: 210.00

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	CIS 73.23

Catalog Description:
In this course, students will study Photoshop's advanced features. Topics will include configuring painting tools, creating web graphics, using analysis features, creating flexible images through the use of variables, creating simple animation, exploring Neural Filters, creating advanced image composites, and using automation to speed up workflow.

Prerequisites/Corequisites:
Course Completion of CS 70.11B

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: In this course, students will study Photoshop's advanced features. Topics will include configuring painting tools, creating web graphics, using analysis features, creating flexible images through the use of variables, creating simple animation, exploring Neural Filters, creating advanced image composites, and using automation to speed up workflow. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion of CS 70.11B
Recommended:
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**			Effective:	Inactive:
CSU GE:	**Transfer Area**			Effective:	Inactive:
IGETC:	**Transfer Area**			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Fall 2023	Inactive:	
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Not Certificate/Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Use advanced features in Photoshop to accomplish desired results.
2. Understand the use cases for including simple animations, variables, and stacks in a Photoshop project.

Objectives:
At the conclusion of this course, the student should be able to:
1. Experiment with Photoshop's painting and editing tools and compare their characteristics, functions, options, and customization procedures.
2. Distinguish among monitor, screen image, and printed image resolution.
3. Evaluate a set of system specifications and determine if Photoshop, and associated plug-ins, can be successfully installed.
4. Set up the Photoshop workspace for program efficiency and ease of work.
5. Evaluate preference options, built-in and custom workspaces, and custom keyboard shortcuts and menus.
6. Determine an appropriate application for each of the following color models and modes: bitmap, grayscale, duotone, RGB (Red, Green, Blue), CMYK (Cyan Magenta Yellow Black), Lab, indexed color, multichannel, 8-bit, 16-bit, and HDR (High Dynamic Range) images.
7. Given a scenario, choose the appropriate file format to optimize images for the Web and explore optimization settings to determine the appropriate file format, save options, and procedures needed.
8. Explain and demonstrate how slices can be used to optimize images for the Web, including layer-based, user-based, and linked slices.
9. Identify color reproduction challenges and examine the color management workflow process used in Adobe Photoshop to produce consistent color.
10. Evaluate a graphic and describe the steps to prepare the image for printing with color

separations and comparables.
11. Design, format, and edit documents that include decorative text, shape layers, and paths.
12. Compare and contrast the characteristics, functions, limitations, and appropriate use of layers, channels, and masks.
13. Examine and demonstrate compositing techniques such as layer blending settings and the Apply Image and Calculations commands.
14. Create a custom action and use that action to batch-process a group of files.
15. Experiment with a variety of techniques that provide believable light sources and shadows in Photoshop documents.
16. Use additional Photoshop features including variables and stacks.

Topics and Scope:

I. Resolution and Painting
- A. Logistics
- B. Adobe Certified Expert (ACE) information
- C. File submission
- D. Painting tips and tricks
- E. Resolution review; print and screen

II. Optimizing and Customizing Photoshop
- A. Enhancing Photoshop performance
  1. Hardware and software requirements
  2. Performance optimization
  3. Performance preferences
- B. Workspace refinement
  1. Built-in workspaces
  2. Custom keyboard shortcuts and menus
  3. Cursors
- C. Image views and versions
  1. Multiple windows of same document
  2. History panel: linear and non-linear, snapshots, states
  3. History log
- D. Annotations

III. Color Theory
- A. Color models: additive, subtractive, HSB (Hue, Saturation, Brightness)
- B. Image modes: RGB (Red, Green, Blue), grayscale and bitmap, indexed
- C. Color channels
- D. RGB to grayscale conversion
- E. Grayscale to bitmap conversion
- F. Image modes: RGB, CMYK, multichannel, duotone
- G. RGB to lab conversion
- H. RGB to CYMK: when, why and how
- I. Soft color proofing
- J. Grayscale to duotone, tritone, and quadtone
- K. Make, save, and use custom swatches with practical example
- L. Spot color channels

IV. Web Graphics and Animation
- A. Animation
- B. Indexed color and color tables
- C. Web file formats and optimization (save for web)
- D. Slicing

V. Niche Features

- A. Variables
- B. Stacks

VI. Color Management
- A. Color reproduction challenges
- B. Color management systems
- C. Calibration
- D. Photoshop color settings

VII. Type
- A. Font types (PostScript, TrueType, and OpenType) and issues
- B. Type preferences
- C. Type tools and their settings
- D. Character and paragraph panels
- E. Spell check
- F. Rasterizing type
- G. Type mask tools
- H.Type tricks
- I. Portable Document Format (PDF) and embedding fonts

VIII. Paths and Fill Layers
- A. Vector graphics terminology (bitmap vs. vector)
- B. Creating paths
- C. The freeform pen tool
- D. Editing paths
- E. The paths panel
- F. Filling and stroking paths with pixels
- G. Fill layers
- H. Type on and in a path

IX. Shapes and Vector masks
- A. Modifying shapes
- B. Defining custom shapes
- C. Vector masks
- D. Clipping paths
- E. Importing and exporting vector elements
- F. Vector file formats

X. Masks and More Masks
- A. Types of masks
  1. Quick mask
  2. Alpha channel
  3. Vector mask
  4. Clipping mask
  5. Type mask tool
- B. Case studies

XI. Combining and Compositing
- A. Layer blend settings
  1. Advanced blending
  2. Knockout
  3. Blend If
- B. Apply image
- C. Calculations

XII. Actions
- A. Action panel
  1. Button view
  2. Standard view

B. Creating actions
1. Insert stops
2. Fit image
3. Conditional mode change
C. Adding interactivity
1. Playback options
2. Modal changes
D. Editing actions
E. Droplets

XIII. Light and Shadow in Compositions
A. Shadows techniques
1. Drop shadow
2. Cast shadow
3. Reconstructed shadow
B. Lens flare
C. Lighting effects
D. Global light

Assignment:

1. Weekly reading (approximately 20 pages)
2. Photoshop projects (10-15), such as:
A. Painting on a provided document to demonstrate the use of a variety of brush tool painting mode settings
B. Converting a provided RGB document to grayscale image mode using at least three different conversion techniques. Then convert the favored grayscale image to at least three different multitone images. Prepare a Contact Sheet of the two best grayscale and multitone images
C. Use Variables to create at least eight form letter-style documents
D. Place a provided vector graphic into Photoshop, slice the document, and animate one region of the image. Save the document, optimizing to the contents of each slice for fast Web viewing
E. Using only vector tools, create a digital garden. Document the vector tools and formatting used
F. Create an action and play it back on a single image. Then make a droplet to apply the action to a series of files
3. Quizzes (5 minimum)
4. Midterm and comprehensive final exam

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written procedural documentation	Writing 0 - 10%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Photoshop Projects	Problem solving 10 - 20%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Photoshop Projects	Skill Demonstrations 30 - 50%

Exams: All forms of formal testing, other than skill performance exams.

Quizzes; midterm; final	Exams 25 - 45%

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Hidden Power of Adobe Photoshop, The: Mastering Blend Modes and Adjustment Layers for Photography. Adobe Press. 2020.
Adobe Photoshop. 2nd ed. A Complete Course and Compendium of Features. Rocky Nook Publishing. 2023.