

**CS 70.12 Course Outline as of Spring 2011****CATALOG INFORMATION**

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

<b>Units</b>	<b>Course Hours per Week</b>		<b>Nbr of Weeks</b>		<b>Course Hours Total</b>	
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:**

A detailed study of Photoshop's advanced features. Successful completion of this course and CS 70.13 prepares students for the Adobe Photoshop Certified Expert exam. CS 70.12 and CS 70.13 do not need to be taken in sequence.

**Prerequisites/Corequisites:**

Course Completion of CS 70.1B ( or CS 70.11B or CIS 73.22)

**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: A detailed study of Photoshop's advanced features. Successful completion of this course and CS 70.13 prepares students for the Adobe Photoshop Certified Expert exam. CS 70.12 and CS 70.13 do not need to be taken in sequence. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion of CS 70.1B ( or CS 70.11B or CIS 73.22)

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>		Effective:	Inactive:	
<b>CSU GE:</b>	<b>Transfer Area</b>		Effective:	Inactive:	
<b>IGETC:</b>	<b>Transfer Area</b>		Effective:	Inactive:	
<b>CSU Transfer:</b>	Transferable	Effective:	Spring 2000	Inactive:	Fall 2019
<b>UC Transfer:</b>		Effective:		Inactive:	

### **CID:**

### **Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of the course, students will 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 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.

## **Topics and Scope:**

### **I. Resolution and painting**

- A. Logistics
- B. ACE (Adobe Certified Expert) information
- C. File submission
- D. Painting tips and tricks - wow stuff
- 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 palette: linear and non-linear, snapshots, states
  3. Image, Duplicate commands
  4. History log
- D. Annotations

### **III. Color Theory**

- A. Color models: additive, subtractive, HSB (Hue, Saturation, Brightness)
- B. Image modes: RGB, 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 and variables in Photoshop

### **V. ImageReady**

- A. Photoshop vs. IR (ImageReady) - when do you use each?
- B. Slicing and variables in IR
- C. Optimization palette

- D. Image map
- E. Rollovers
- F. Previewing web effects
- 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 palettes
  - E. Spell check
  - F. Converting type layers (outlines, shape layers, and rasters)
  - G. Type mask tools
  - H. Type tricks
  - I. PDF (Portable Document Format) and embedding fonts
- VIII. Paths and fill layers
  - A. Vector graphics terminology (bitmap vs. vector)
  - B. Creating paths
  - C. The Freedom Pen tool
  - D. Editing paths
  - E. The Paths palette
  - 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 palette
    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. Paint on a provided document to demonstrate the use of a variety of brush tool painting mode settings. Complete a documentation form that specifies the tools, settings, and painting modes used.
2. Complete a worksheet to demonstrate understanding of Photoshop system requirement and customization.
3. Convert 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 Picture Package of the two best grayscale and multitone images. Complete a documentation form that specifies the conversion methods used.
4. Convert a provided RGB document to grayscale image mode using at least four different conversion techniques. Prepare a Picture Package of the four best grayscale images. Complete a documentation form that specifies the conversion methods used and assesses which is the most successful.
5. Convert a provided RGB document to CMYK image mode using at least three different conversion techniques. Prepare a Picture Package of the three best conversions. Complete a documentation form that specifies the conversion methods used and assesses which is the most successful.
6. Place a provided vector graphic into Photoshop, slice the document, and animate one region of the image. Save the document, optimizing according to the contents of each slice, for fast Web viewing.
7. Complete a worksheet to demonstrate understanding of color management terms and concepts.
8. Format the type on a provided document using a variety of different settings. Save the file in a format that preserves vector data and embeds fonts. Complete a documentation form that specifies the type formatting used.
9. Using only vector tools, create a digital garden. Save the file in a format that preserves vector data and embeds fonts. Complete a

- documentation form that specifies the vector tools and formatting used.
10. Create an action, and play it back on a single image. Then make a Droplet to apply the action to a series of files.
  11. Based on a theme chosen by the class, prepare an original tabloid-size poster, properly set up for print. This complex composite image will combine both raster and vector elements, appropriately masked, with care taken to make the lighting believable. Prepare a grayscale copy of the image, and use the type tool to document the elements and options used. Prepare a CMYK proof to the image.
  12. At least five quizzes.
  13. 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 5 - 10%
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**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Creation, manipulation, repair and analysis of images	Problem solving 10 - 20%
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**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Weekly assignments and course project(s)	Skill Demonstrations 30 - 50%
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**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, Completion, true/false, short answer	Exams 25 - 45%
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**Other:** Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%
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### Representative Textbooks and Materials:

Adobe Photoshop CS4 Studio Techniques, by Willmore, Ben and Ablan, Dan. Adobe Press: 2009