### CS 70.12 Course Outline as of Fall 2014

# 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:**
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 70.11B

**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 70.11B
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: | Spring 2000 | Inactive: | Fall 2019 |
| **UC Transfer:** | | 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 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. ACE (Adobe Certified Expert) 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

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. Add at least five 3D objects to an image.
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 Contact Sheet 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 Contact Sheet of the four best grayscale images. Complete a documentation form that specifies the conversion methods used and assesses which is the most successful.
5. Use a Variables feature to create at least eight 'form letter' style images.
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. 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 provided to 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.
12. At least five quizzes.
13. Midterm and comprehensive final exam.
14. Reading approximately 20 pages per week

**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.

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| Written procedural documentation | Writing<br>5 - 10% |

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

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| Creation, manipulation, repair and analysis of images | Problem solving<br>10 - 20% |

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

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| Assignments | Skill Demonstrations<br>30 - 50% |

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

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| Multiple choice, Completion, true/false, short answer | Exams<br>25 - 45% |

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

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|---|---|
| None | Other Category<br>0 - 0% |

**Representative Textbooks and Materials:**
Photoshop CC Bible. Dayley, Lisa DaNae and Dayley, Brad. Wiley: 2013