

Adobe Photoshop

Level: 3

Career Cluster: Media Arts, Digital Technology

Program: Design and Digital Arts, Information Technology

Pathway: Graphic Design, Web Design

Course Catalog Description

This course develops advanced skills in Adobe Photoshop, with an emphasis on digital imaging, photo retouching, compositing, and professional design workflows for print, web, and media applications.

Summary

This course concentrates on the high-end capabilities of Adobe Photoshop as an illustration, design and photo retouching tool. Students explore a wide range of selection and manipulation techniques that can be applied to photos, graphics, and videos. This guide is based on the 2021 version of *Visual Design Using Adobe Photoshop*.

<https://certifiedprofessional.adobe.com/photoshop#ExamGuide>

Notes

The updated course reflects a shift from a primarily technical, software-driven curriculum to a more comprehensive, industry-aligned program that emphasizes professional application and career readiness. The original course focused on foundational Photoshop skills such as understanding the interface, working with layers, selections, masks, and applying basic retouching and image manipulation techniques. In contrast, the revised course expands these core competencies into a more structured framework that includes portfolio development, leadership, work-based learning, and a final project assessment, while also integrating advanced workflows, communication, and real-world design practices. This updated approach better aligns with current CTE expectations by emphasizing applied learning, professional skills, and preparation for certification and postsecondary opportunities.

Student Learning Outcomes

1. Working in the Design Industry

Objective: covers concepts related to working with colleagues and clients as well as crucial legal, technical, and design-related terminology and principles.

- 1.1) Identify terminology and interpret communication relating to the purpose, audience, and audience needs for developing designs.
 - a. Determine whether content is relevant and has an appropriate design for the purpose, audience, audience needs, and user experience.
 - b. Identify requirements based on how the designs will be used.
 - c. Identify techniques for communicating about design plans with peers and clients.
 - d. Define basic project management concepts.
- 1.2) Determine the type of copyright, permissions, or licensing required to use specific content.
 - a. Identify legal and ethical considerations for using third-party content.
 - b. Determine when and how to obtain permission to use images of people and locations.
- 1.3) Define key terminology related to digital images.
 - a. Define digital image terminology.
 - b. Explain how color is represented in digital images.
 - c. Differentiate between destructive and nondestructive editing.
- 1.4) Evaluate the application of photographic and design principles.
 - a. Integrate the elements and principles of design to create effective communication.
 - b. Identify how typographic adjustments create hierarchy and enhanced readability.

2. Project Setup and Interface

Objective: covers the interface setup, program settings, and reusable assets that assist in an efficient and effective workflow, as well as knowledge about importing digital assets for a project.

- 2.1) Create or modify a document with the appropriate settings for the intended output.
 - a. Set appropriate document settings.
 - b. Create and use document presets for specific project needs.
- 2.2) Navigate and customize the workspace and use design aids to improve workflow.
 - a. Identify and manipulate elements of the interface.
 - b. Configure application preferences.
 - c. Navigate a document.
 - d. Use rulers, guides, and grids.
- 2.3) Import assets into a project.
 - a. Open and place assets in a Photoshop document.
- 2.4) Manage colors, swatches, and gradients.
 - a. Work with color.

- b. Create, customize, and organize gradients.
 - c. Create and organize swatches.
- 2.5) Work with brushes, styles, and patterns.
 - a. Open, create, group, and import libraries of brushes, styles, and patterns.
 - b. Create, use, edit, and organize brushes, styles, and patterns.

3. Layers, Masks, and Adjustments

Objective: covers using layers and masks to organize content and change content visibility.

- 3.1) Use layers to manage design elements.
 - a. Manage, identify, and organize layers.
 - b. Adjust a layer's appearance.
 - c. Manage Smart Objects.
- 3.2) Modify layer visibility using masks.
 - a. Manage masks in the Layers panel.
 - b. Create a pixel mask.
 - c. Use the frame tool.
 - d. Create a vector mask.
 - e. Create a clipping mask.
- 3.3) Use adjustments and adjustment layers.
 - a. Make adjustments.
 - b. Create and use adjustment layer presets.

4. Adding Content to a Document

Objective: covers core tools used to create content.

- 4.1) Create and edit using raster drawing tools and features.
 - a. Use creation tools and features.
 - b. Use deletion and revision tools and features.
 - c. Use AI tools to create content.
- 4.2) Create and edit using vector drawing tools and features.
 - a. Use vector drawing tools and features.
- 4.3) Add and modify text.
 - a. Use type tools to add typography.
 - b. Adjust character and paragraph settings.
 - c. Convert text to graphics.

5. Modifying Visual Elements

Objective: covers features and functions used to alter the appearance of content.

- 5.1) Make, manage, and manipulate selections.
 - a. Make selections using a variety of tools.
 - b. Modify and refine selections using various methods.
 - c. Save and load selections.
- 5.2) Manipulate images using retouching and repairing tools.

- a. Use various tools to restore, retouch, and repair images.
 - b. Use Photoshop tools to alter exposure and saturation.
- 5.3) Transform digital graphics.
 - a. Modify the canvas or artboards.
 - b. Transform layers, groups, and selections.
- 5.4) Modify the appearance of design elements by using filters, styles, and materials.
 - a. Use filters.
 - b. Apply, modify, copy, and manage layer styles.
 - c. Apply materials.

6. Publishing Digital Media

Objective: Covers saving and exporting documents or assets.

- 6.1) Export documents and assets.
 - a. Export elements of a document.
 - b. Export a document.
- 6.2) Save documents and assets.
 - a. Save documents.
 - b. Save in appropriate image formats for the intended purpose.

7. Career Exploration and Postsecondary Opportunities

Objective: Students will analyze career pathways in graphic design by exploring industry roles, workplace expectations, required education, certifications, professional organizations, and postsecondary opportunities available in Colorado in order to make informed academic and career decisions.

- 7.1) Identify employment opportunities in various fields with a focus in the area of graphic design
 - a. Recognize the work typically performed, tools and technology used, and nature of work environments
 - b. Identify potential certifications within the careers
 - c. Find membership organizations associated with the careers
 - d. Understand the necessary education associated within the careers
- 7.2) Define professionalism within the context of graphic design
 - a. Criticism and evaluation
 - b. Presentation
 - c. Assessment
- 7.3) Recognize laws, regulations, and ethics significant to the fields of graphic design
- 7.4) Identify postsecondary opportunities offered in the state of Colorado
 - a. Technical college, community college, 4-year institutions
 - b. Certificates, associates, bachelor, and advanced degree opportunities

8. Portfolio Development

Objective: Students will develop and refine a professional digital imaging portfolio demonstrating technical proficiency and creative problem-solving.

- 8.1) Select and curate Photoshop projects that demonstrate a range of digital imaging skills, including photo retouching, compositing, color correction, and visual effects.
- 8.2) Organize and present portfolio artifacts for digital and/or print formats, ensuring clarity, consistency, and alignment to audience and purpose.
- 8.3) Refine portfolio work using critique, feedback, and professional design standards to improve image quality and visual communication.
- 8.4) Develop written project descriptions and reflections explaining editing techniques, design intent, workflow, and outcomes.
- 8.5) Evaluate portfolio quality based on industry expectations, technical accuracy, creativity, and overall presentation effectiveness.

9. Leadership

Objective: *Students will demonstrate leadership skills in digital imaging environments through effective communication, collaboration, and professional responsibility.*

- 9.1) Demonstrate responsibility, initiative, and accountability in individual and collaborative image-editing tasks.
- 9.2) Apply effective communication skills during critiques, presentations, and client-based discussions using appropriate digital imaging and design vocabulary.
- 9.3) Collaborate with peers to plan, produce, and evaluate image-based projects using shared workflows and creative processes.
- 9.4) Apply problem-solving and conflict-resolution strategies within team-based design environments.
- 9.5) Reflect on personal leadership strengths and areas for growth in creative, technical, and collaborative contexts.

10. Work-Based Learning

Objective: *Students will apply Photoshop skills in authentic professional environments to demonstrate career readiness.*

- 10.1) Apply digital imaging skills to authentic workplace tasks such as photo editing, compositing, marketing visuals, or client-based projects.
- 10.2) Demonstrate workplace expectations including professionalism, time management, organization, and effective communication.
- 10.3) Analyze how client needs, audience, platform requirements, and production constraints influence editing decisions and outcomes.
- 10.4) Document work-based learning experiences through reflections, presentations, or portfolio evidence demonstrating applied skills.
- 10.5) Evaluate personal career readiness based on technical proficiency, employability skills, and feedback from instructors, peers, or clients.

11. Final Assessment Project

Objective: *Students will synthesize course knowledge and technical skills through a comprehensive Photoshop-based design project.*

- 11.1) Plan and develop a final project with a defined purpose, audience, and design specifications.
- 11.2) Apply advanced Photoshop tools and techniques to produce a polished digital image or composited design solution.
- 11.3) Integrate composition, color correction, retouching, and visual effects into a cohesive final product.
- 11.4) Present and justify design decisions using appropriate digital imaging and design vocabulary supported by process documentation.
- 11.5) Evaluate the final project using criteria related to technical quality, creativity, visual communication, and professional readiness.

12. Career and Technical Student Organizations

Objective: *Using the CTSO Resource Document, chapter activities will provide some of the best opportunities CTSO members will have to learn by doing. A successful program of work creates a positive learning atmosphere in the classroom. CTSO members learn how to accept responsibility, work as a team, manage a budget, and handle success and failure. Per the CTE Admin Handbook, CTSOs are embedded into curriculum.*

Professional Development

Prepare each member for entry into the workforce and provide a foundation for success in a career. Becoming a professional does not stop with acquiring a skill, but involves an increased awareness of the meaning of good citizenship and the importance of labor and management in the world of work.

Community Service

Promote and improve goodwill and understanding among all segments of the community through services donated by CTSO chapters, and to instill in its members a lifetime commitment to community service.

Business and Industry Connections

Increase awareness of quality job practices and attitudes, and increase the opportunities for employer engagement and eventual employment.

Financial Leadership

Plan and participate in activities to allow all members to carry out the chapter's projects. Educate members on their own personal finance for current and future success.

Public Relations

Make the general public aware of the good work that students in career and technical education are doing to better themselves and their community, state, nation, and world.

Social Activities

To increase cooperation in the school and community through activities that allow CTSO members to get to know each other in something other than a business or classroom setting.

Academic Standards Alignment

Colorado CTE courses are required to integrate academic and essential skills into course content. The following academic standards have been identified as aligned to this course and should be integrated throughout instruction.

[CO CTE Academic Standards Resources](#) (Rubrics, integration strategies, etc)

[CDE Colorado Academic Standards Online](#) (Online standards lookup tool)

Note: Mathematics and Science standards will be added in the future. Visit the [Colorado Academic Standards](#) page for the most current version.

Reading, Writing and Communicating Crosswalk

Course: Adobe Photoshop

Colorado Academic Standards – Reading, Writing and Communicating

Standard	Prepared Graduate Competency	Description	Course Evidence / Alignment
Standard 1: Oral Expression and Listening	Prepared Graduate 1 – Collaboration	Collaborate effectively as group members or leaders who listen actively and respectfully; pose thoughtful questions, acknowledge the ideas of others; and contribute ideas to further the group's attainment of an objective.	Students collaborate during image-editing projects and critiques, listen to peer feedback, and contribute ideas to improve visual design outcomes.
Standard 1: Oral Expression and Listening	Prepared Graduate 2 – Oral Presentations	Deliver effective oral presentations for varied audiences and varied purposes.	Students present image edits and explain design, composition, and retouching choices for specific audiences and project goals.
Standard 2: Reading for All Purposes	Prepared Graduate 4 – Informational Texts	Read a wide range of informational texts to build knowledge and to better understand the human experience.	Students read and apply informational texts including software tutorials, project briefs, image specifications,

			and digital imaging guidelines.
Standard 2: Reading for All Purposes	Prepared Graduate 5 – Language in Context	Understand how language functions in different contexts, command a variety of word-learning strategies to assist comprehension, and make effective choices for meaning or style when writing and speaking.	Students use appropriate design, photography, and digital imaging vocabulary in technical and creative discussions.
Standard 3: Writing and Composition	Prepared Graduate 7 – Informational Writing	Craft informational/explanatory texts using techniques specific to the genre.	Students write project descriptions, editing rationales, reflections, and documentation explaining Photoshop techniques and creative decisions.
Standard 3: Writing and Composition	Prepared Graduate 9 – Writing Process	Demonstrate mastery of their own writing process with clear, coherent, and error-free polished products.	Students revise and refine written explanations and visual work to produce polished, professional-quality image products.
Standard 4: Research Inquiry and Design	Prepared Graduate 10 – Research and Ethics	Gather information from a variety of sources; analyze and evaluate its quality and relevance; and use it ethically to answer complex questions.	Students research visual references and editing techniques; evaluate sources; and apply ethical image-editing practices including copyright and attribution.

Free Resource Links

7. Career Exploration and Postsecondary Opportunities

- Adobe Certified Professional – Photoshop Exam Guide (Certification, Career Readiness)
<https://certifiedprofessional.adobe.com/photoshop#ExamGuide>
- AIGA Design Careers (Graphic Design Careers, Industry Roles)
<https://www.aiga.org/resources/design-careers>
- O*NET Graphic Designer Profile (Job Outlook, Skills, Work Environment)
<https://www.onetonline.org/link/summary/27-1024.00>
- Colorado Community College System Programs (Postsecondary Pathways, Colorado Programs)
<https://cccs.edu/programs/>

8. Portfolio Development

- Adobe Portfolio Guide (Digital Portfolio Development, Presentation)
<https://helpx.adobe.com/portfolio/get-started.html>
- Behance Portfolio Platform (Portfolio Examples, Industry Standards)
<https://www.behance.net>
- Canva Portfolio Guide (Portfolio Organization, Branding)
<https://www.canva.com/learn/portfolio/>
- Wix Portfolio Creation Guide (Online Portfolio, Personal Branding)
<https://www.wix.com/blog/how-to-create-a-portfolio>

9. Leadership

- Indeed Leadership Skills Guide (Professional Communication, Workplace Skills)
<https://www.indeed.com/career-advice/career-development/leadership-skills>
- MindTools Leadership Resources (Leadership Development, Teamwork)
https://www.mindtools.com/pages/main/newMN_LDR.htm
- Edutopia Collaboration Strategies (Collaboration, Team-Based Learning)
<https://www.edutopia.org/topic/collaboration>

10. Work-Based Learning

- NAF Work-Based Learning Continuum (Work-Based Learning, Career Readiness)
<https://naf.org/work-based-learning/>
- Trello Project Management Guide (Workflow, Project Organization, Collaboration)
<https://trello.com/guide>
- Adobe Photoshop Tutorials (Applied Skills, Real-World Projects)
<https://helpx.adobe.com/photoshop/tutorials.html>
- Indeed Soft Skills Guide (Professionalism, Workplace Behavior)
<https://www.indeed.com/career-advice/resumes-cover-letters/soft-skills>

11. Final Project Assessment

- Adobe Creative Cloud Learn (Project-Based Learning, Design Process)
<https://creativecloud.adobe.com/learn>
- Google Design Sprint Kit (Project Planning, Design Thinking)
<https://designsprintkit.withgoogle.com/>
- Canva Design Principles Guide (Design Evaluation, Visual Communication)
<https://www.canva.com/learn/design-elements-principles/>
- Rubistar Rubric Maker (Assessment, Project Evaluation)
<http://rubistar.4teachers.org/index.php>



Technology Student Association – National Competitive Events

Photographic Technology

Objective: *Students will capture, edit, document, and present a photographic portfolio that meets TSA Photographic Technology requirements for image quality, technical settings, editing process, copyright compliance, and presentation.*

- Research the annual TSA Photographic Technology theme and plan original images that respond to the required challenge criteria.
- Capture or select original photographs that demonstrate composition, lighting, perspective, exposure, and visual storytelling.
- Edit images using appropriate digital editing techniques such as cropping, color correction, retouching, masking, filters, and adjustments.
- Document camera settings, image interpretation, editing decisions, and software tools used in the final portfolio.
- Prepare required references, resources, copyright checklist, and consent/release forms when needed.
- Organize and present a photographic portfolio that communicates the annual theme clearly and professionally.
- Evaluate the portfolio using TSA criteria for technical quality, creativity, composition, documentation, and theme connection.

Resources

- Technology Student Association – Photographic Technology competition guidelines
<https://tsaweb.org/competitions-programs/tsa/themes-problems>
- Adobe Photoshop – Photo editing and digital image tools
<https://www.adobe.com/products/photoshop.html>
- Adobe Lightroom – Photo editing and image organization
<https://www.adobe.com/products/photoshop-lightroom.html>
- Purdue OWL – Copyright and fair use resources
<https://owl.purdue.edu/>



Technology Student Association – National Competitive Events

Promotional Design

Objective: *Students will design, produce, document, and present promotional materials that meet TSA Promotional Design requirements for branding, visual communication, production quality, and portfolio documentation.*

- Research the annual TSA Promotional Design theme, target audience, required products, and branding expectations.
- Develop a consistent visual identity using appropriate typography, color, layout, imagery, and design principles.
- Create required promotional items that communicate a clear theme, message, and purpose.
- Use digital design tools to prepare clean, professional, and usable final products for print or digital presentation.
- Document the design process through sketches, drafts, production notes, references, and required portfolio materials.
- Prepare final promotional products for submission or display according to TSA event procedures.
- Evaluate the final entry using TSA criteria for creativity, consistency, production quality, communication, and theme alignment.

Resources

- Technology Student Association – Promotional Design competition guidelines
<https://tsaweb.org/competitions-programs/tsa/themes-problems>
- Adobe Photoshop – Image editing and promotional design tools
<https://www.adobe.com/products/photoshop.html>
- Adobe Express – Promotional graphics and design tools
<https://www.adobe.com/express/>
- Canva – Branding, layouts, and promotional design templates
<https://www.canva.com/>