



DIGITAL IMAGE EDITING

ACKNOWLEDGMENTS

CONTENT AUTHOR

Gabriel Dupon

Colorado 4-H Volunteer, Owner of Dupon Studio

CONTENT CONTRIBUTORS

Aimee Kanode

County Specialist, 4-H Youth Development and Horticulture, CSU Extension, Morgan County

Lisa Sholten

State Program Specialist, 4-H Youth Development, Civic Engagement and Curriculum, CSU Extension, State 4-H Office



The contents in this book may contain subjective, outdated, or inaccurate information. The Author, Contributors, and Publisher does not assume any liability for loss or damage caused by errors or omissions.

Please be informed that this manual includes several links to third-party educational content. The views and opinions expressed by the individuals or companies associated with these links are not necessarily those of the author, contributors, or publishers. Furthermore, if you encounter any broken links, kindly contact the author so that they can be promptly updated.

© Copyright 10/2025 - All rights reserved

Pages 3-7: © Copyright, Colorado State University Extension - 11/2023 Pages 8-32: © Copyright, Gabriel Dupon - 10/2025 (1st edition: 10/2025)

No part of this book may be reproduced in any form without express written permission from Gabriel Dupon or Colorado State University Extension.

Colorado State University, U.S Department of Agriculture and Colorado counties cooperating. To simplify technical terminology, trade names or products and equipment occasionally will be used. No endorsement of product names is intended nor is criticism implied of products not mentioned.

Colorado State University Extension is an equal opportunity provider. Colorado State University does not discriminate on the basis of disability and is committed to providing reasonable accommodations. CSU's Office of Engagement and Extension ensures meaningful access and equal opportunities to participate to individuals whose first language is not English. https://col.st/OWMJA

Colorado State University Extension es un proveedor que ofrece igualdad de oportunidades. Colorado State University no discrimina por motivos de discapacidad y se compromete a proporcionar adaptaciones razonables. Office of Engagement and Extension de CSU garantiza acceso significativo e igualdad de oportunidades para participar a las personas quienes su primer idioma no es el inglés. https://col.st/OWMJA

TABLE OF CONTENTS

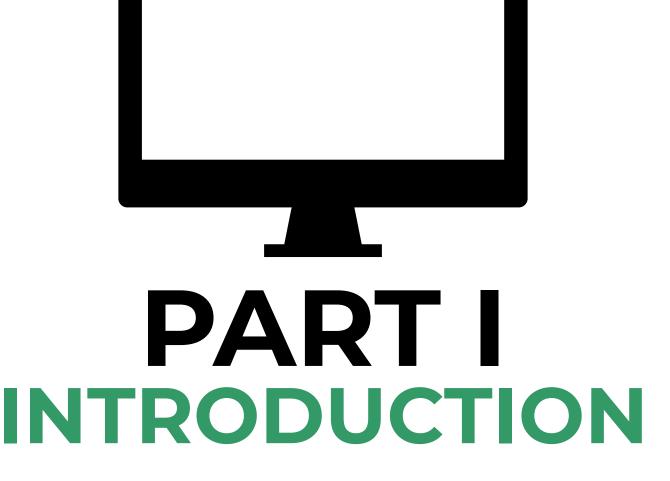
PART I: INTRODUCTION Page 3 **Experiential Learning Process** About the 4-H Thriving Model Page 5 Targeting Life Skills Page 7 Welcome To Photo Editing Page 8 **PART II: GETTING STARTED** How To Create a Demo Page 11 **Equipment You Need** Page 13 How To Do the Techniques Page 14 Skills To Focus On Page 15 **Presentation Tips** Page 16 **Editing Ethics** Page 17 Growing Photography Skills Page 19 Learning Resources Page 20 **PART III: TECHNIQUES** 1 - Color Adjustments Page 23 2 - Tone Adjustments Page 24 3 - Creative Cropping Page 25 4 - Al Generative Fill Page 26 5 - Error Corrections Page 27 6 - White Balance Page 28 7 - Artistic Effects Page 29 8 - Photo Merges Page 30 9 - Color Grading Page 31 10 - Mask Editing Page 32

Page 33

Page 34

11 - Retouching

12 - Custom



BEFORE YOU BEGIN THIS PROJECT, READ THIS SECTION.

BY TAKING THIS APPROACH, YOU'LL

BE SETTING YOURSELF UP FOR

SUCCESS! THIS WILL ENABLE YOU TO

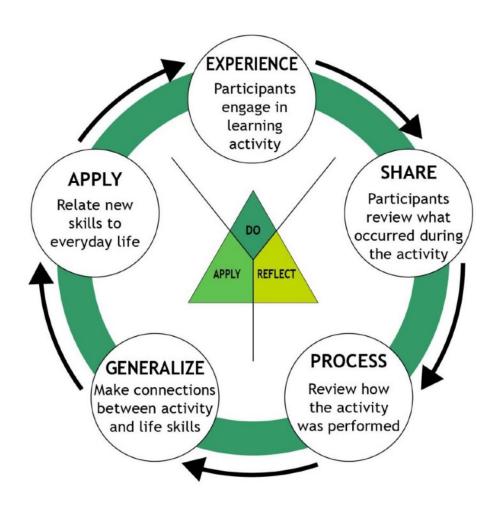
GAIN THE MOST KNOWLEDGE

POSSIBLE FROM THIS PROJECT.

EXPERIENTIAL LEARNING PROCESS

The 4-H program utilizes a process where adult leaders ask open-ended questions that challenge youth to think. Through this inquiry, youth can propose hypotheses and determine their own solutions. The Experiential Learning Model developed by Pfieffer and Jones (1985) and modified by 4-H includes five specific steps that can be summarized into three main processes: **Do, Reflect, and Apply.**

The Experiential Learning Model encourages discovery with minimal guidance from others. A situation, project, or activity is undertaken for individual thought and problem-solving. Minimum outside assistance is provided, but support is offered to the individual by questioning at each stage. The youth participating in an activity reflect on what they did and then assess how what they learned can be applied to a life situation. Below are questions that might help during each stage of learning.



1 - EXPERIENCE (DOING)

Questions: What sources of information are available? What is possible? What do you expect to see? How is it working? What else might you try?

2 - SHARE (REFLECTING ON WHAT OCCURRED)

Questions: What was your goal for this project/activity when you began? What happened? What were the results? What was most difficult? How do you know? What did you learn? What surprised you? How did you share this project/activity with others?

3 - PROCESS (REFLECTING ON WHAT'S IMPORTANT)

Questions: What problems seemed to reoccur? How did you solve them? What similar experiences have you had? How was the experience like or unlike experiences others had? Would you do anything differently? What did you learn about making decisions? What suggestions would you have for someone else who wanted to do a similar project/activity? What life skills were you developing through your project? Why are life skills important? What new questions do you have about yourself, others, and future goals?

4 - GENERALIZE (SO WHAT?)

Questions: What did you learn about yourself or about the activity? What key points have you learned? How did you decide what to do? What else could you have done? How does this relate to something else in life? Where have you faced similar challenges in your life? Where might this situation occur in the future? Why is it important to have plenty of information before making decisions? What did you learn about your own skill in communicating with others?

5 - APPLY (NOW WHAT?)

Questions: How does this project/activity relate to your everyday life? Why is this project/activity important to you? Where else can this skill be used? How will you use this in the future? What will you do differently after this experience? How can I make an impact? What will I create next? In what ways do people help each other learn new things? What are qualities you think are important in a leader? If someone helped or mentored you in this project, what would you tell them you learned and what difference it has made in your life? How would you express your appreciation?

ABOUT THE 4-H THRIVING MODEL

The 4-H Program Leaders' Working Group developed the 4-H Thriving Model to advance and support the accomplishment of the 4-H Youth Development 2025 National Strategic Plan. They describe the 4-H Thriving Model as follows:

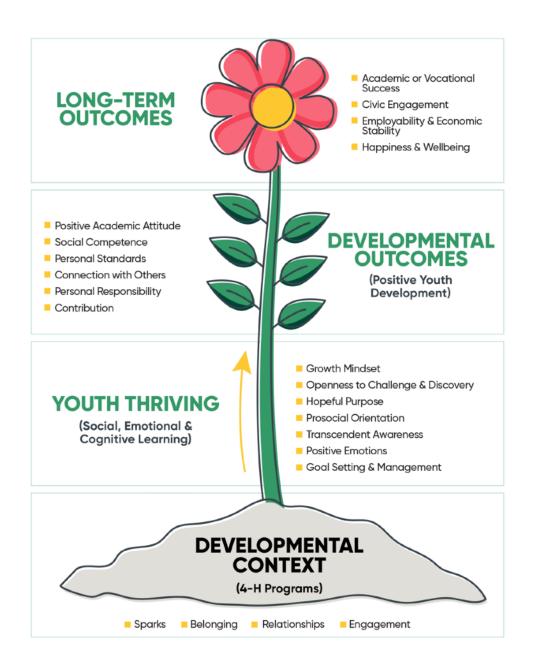
The 4-H Thriving Model illustrates the process of positive youth development in 4-H programs by connecting high-quality program settings to the promotion of youth thriving.

High-quality 4-H program settings provide youth a place to belong, matter, and explore their personal spark. High-quality settings foster developmental relationships with youth, relationships that express care, challenge growth, and share power. These components help ensure that 4-H programs provide a nourishing developmental context – a place where youth can belong and grow.

High-quality 4-H programs contribute to Positive Youth Development (PYD) through the intentional promotion of social, emotional, cognitive, and behavioral habits of mind. In the 4-H Thriving Model, this process of PYD is described by seven indicators of thriving: openness to challenge and discovery, growth mindset, hopeful purpose, pro-social orientation, transcendent awareness, positive emotionality, and self-regulation through goal setting and management.

Youth who experience high-quality developmental settings in 4-H with an emphasis on these key social-emotional skills achieve key positive youth development outcomes, including academic motivation and success, social competence, high personal standards, connection with others, personal responsibility, and contribution to others through leadership and civic engagement.

Youth who achieve positive developmental outcomes are more likely to also achieve long-term outcomes marked by vocational or academic success, civic engagement, employability and economic stability, and happiness and wellbeing.



Learn more:

helping-youth-thrive.extension.org



TARGETING LIFE SKILLS

A skill is a learned ability. Life skills are those abilities that assist individuals to lead successful, productive, and satisfying lives. In 4-H, we use the Targeting Life Skills Model to help youth become competent and prepared for adulthood. The Targeting Life Skills Model categories are based on the four H's from the 4-H Clover (Head, Heart, Hands, and Health). Under each of these main categories, there are four categories and eight subcategories listing specific skills youth learn in 4-H. The main goal in 4-H positive youth development is to provide developmentally appropriate opportunities for youth to experience life skills and to be able to use them throughout a lifetime. By understanding the importance of the 4-H framework and its structure, 4-H members, parents, professionals, and leaders will know the expectations and will be able to effectively use 4-H delivery methods to help youth learn these life skills.

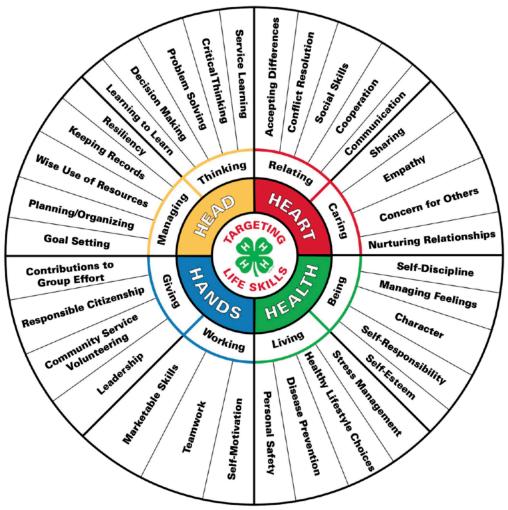


Image credit: Hendricks, P. (1998) "Developing Youth Curriculum Using the Targeting Life Skills Model" (https://store.extension.iastate.edu/product/16427)

WELCOME TO PHOTO EDITING

As you embark on this unit of the 4-H Photography Project, you'll be tasked with digitally manipulating and enhancing your images. Prior experience in photography is highly recommended.

This unit has a straightforward structure but offers flexibility in curating your project experience:

- → Part II of this manual will provide you with guidance on how to approach the project for success.
- Part III will include technique activities that will help you create the project for this unit, known as the Demo Gallery.

WHAT IS A DEMO GALLERY?

A Demo Gallery is the core of this project, and it's the primary factor that will determine your score if you submit your project at a Fair. Essentially, it serves as a showcase of your editing skills and the techniques you employed to achieve the desired look for each image.

WHAT TO COMPLETE FOR THIS PROJECT

- ☐ Completed record book: Write about your challenges and accomplishments in your story. A few questions you can ask yourself when writing your goals page and story:
 - ➡ Which editing techniques did you find most enjoyable?
 - → Did you prefer editing or taking pictures more?
 - ➡ What ethical dilemmas did you encounter?
 - → How did editing change your perspective?
- Demo Gallery of edited images: Photos that you both captured and edited, displayed in your binder. See "What is a Demo Gallery?" above for more info. It should include twenty demos in your gallery. This is a total of forty photos. Information about how to create each demo is in Part II of this manual.
- One display photo: A single 5" x 7" print with an 8" x 10" matted-only frame. This photo should equally demonstrate your photography and editing ability. A copy of the unedited version of this display photo should also be included in your journal/binder (either in your record book or part of your Demo Gallery).



CAPTURING A GREAT IMAGE IS ONLY HALF THE BATTLE; EDITING WILL MAKE YOUR IMAGE TRULY STAND OUT.

TO HAVE A SUCCESSFUL PROJECT
YEAR WITHOUT ANY CONFUSION,
PLEASE MAKE SURE YOU READ
THROUGH THIS SECTION CAREFULLY.

HOW TO CREATE A DEMO

A demo is a single example within your Demo Gallery. It is a single page with two printed photos. There are no size requirements for printed photos; however, 4" x 6" is strongly recommended. One should be the original unedited image, and the second should be the finished edited photo.

DEMO LABELS

Each page in your Demo Gallery should be labeled with three pieces of information. Unlike traditional photography units, you won't be labeling each individual photo, but rather each demo page. At the top of each page, include the following label:

Editing Application:	List the application(s) you used for editing the photo.
Demo Number:	Unique organizational number from 1-20.
Technique Used:	List the technique you chose to follow from Part III of this manual.

IMPORTANT: Please indicate which of the two photos is unedited and edited. You may also include any information about the editing process, but this is optional. However, if Artificial Intelligence (AI) was used in any capacity, you must provide a brief explanation of how you utilized AI to modify the image.

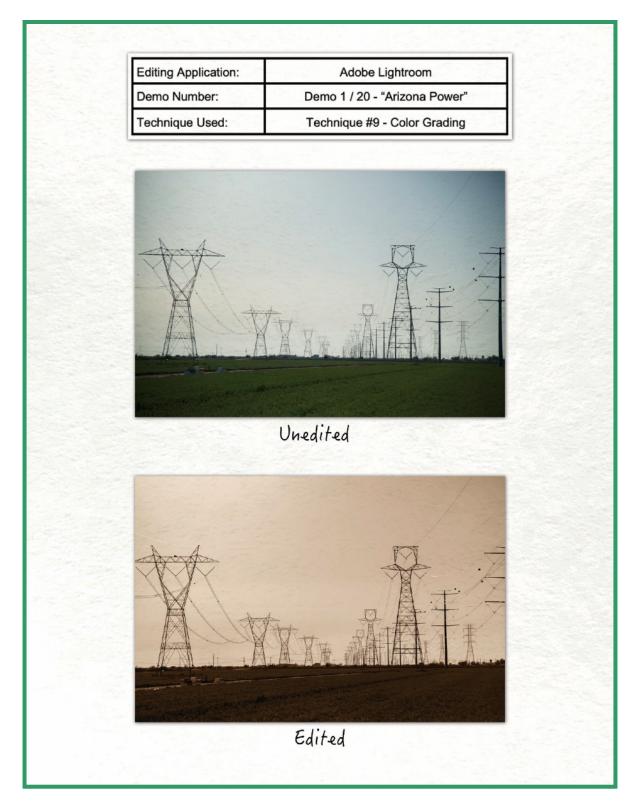
DISPLAY PHOTO LABEL

Use this label template and attach it to the back of your display photo.

Name:	
County:	
Editing Application:	
Technique Used:	
Notes:	

DEMO EXAMPLE

To help you visualize what an individual demo looks like, refer to the example below. Each demo page in your Demo Gallery should adhere to this format:



EQUIPMENT YOU NEED

For your project journey, here is a list of recommended equipment:

- □ Camera: An ability to capture photos. Bonus if your camera can capture in the RAW image format. The type of camera or lenses used does not matter (a mobile phone camera is sufficient).
- ☐ Computer: A device that you can edit images on. A desktop computer or laptop is strongly preferred, but a tablet or phone can also work if that is your only option.
- ☐ Data storage: A place to safely store all of your photos and edits. This can be on your computer, a cloud system, or a secure hard drive.
- ☐ Editing applications: You'll need an advanced editing application beyond your regular one.

CHOOSING AN EDITING APPLICATION

The recommended suite for this project is the Adobe Photography Plan (Photoshop + Lightroom), as it's the industry standard and used in the technique sections in Part III. Serif Affinity Photo is another great, less expensive option, but may take extra time to learn.

Free options do exist, but not at the editing capability compared to the above-mentioned suites. Applications such as Fotor, Apple Photos, Darktable, and Google Photos are a few decent options you may also consider.

Note: Regardless of the application you select, you will be solely responsible for finding tutorials and educational resources to learn how to use it.

LEARNING A NEW APPLICATION

Understanding how to use a new application can be intimidating, especially if you are trying to learn something advanced such as Photoshop. Most software developers publish excellent educational tutorials that you can utilize (visit "Learning Resources" on page 20). Udemy and YouTube are great resources as well. Please make sure you have parent or legal guardian permission before using the internet.

HOW TO DO THE TECHNIQUES

Part III of this manual presents eleven techniques to help you edit images in various ways. In this photography unit, you'll create a Demo Gallery featuring twenty demos (forty photos) and one display photo, all using these techniques. While you don't have to complete all the techniques listed in this manual, we encourage you to try as many as possible.

PLAN YOUR EXPERIENCE

It is crucial that you make a plan of what techniques you will demonstrate. For example, you could do five demos of artistic effects, two demos of photo merges, one demo of AI generative fill, seven demos of mask editing, and five demos of tone adjustments. You get to determine what you want to work on!

TECHNIQUE DIFFICULTY

For guidance, each technique has a difficulty level. You may be familiar with this if you've completed the "Low-Light Photography" project. However, don't let this determine whether you attempt a technique or not. Try out easy, moderate, and challenging ones, as there's always something new to learn.

Note: If you submit your project to county or state fair judging, your score won't be determined by the difficulty of the techniques you select. Instead, it will be based on the quality of execution of those techniques.

LEVEL	DESCRIPTION
1	An easy technique with tutorials that may not be necessary to watch. These techniques don't require an advanced editing application as only very basic editing techniques are used.
2	A moderately difficult technique. These techniques require the use of basic features found on advanced editing applications.
3	The most challenging editing techniques. Using complex editing features found mostly on Photoshop or Affinity Photo will be necessary to complete these techniques.

SKILLS TO FOCUS ON

This unit is quite complex and requires a lot of attention. Starting a project without understanding the skills to focus on is an inefficient way to learn. Here's a list of skills you should focus on. Additionally, if you submit your project at a fair, these skills will be used as the rubric to evaluate your project.

EDITING PROFICIENCY

The comparison between your unedited and edited images will showcase your editing skills. Evaluating your editing proficiency involves two key aspects:

- ❖ Technical: Include your ability to adjust exposure, balance color, crop, retouch, sharpen, and correct errors.
- Creative: Involves adding artistic effects, color grading, converting images to black and white, and applying vignetting.

PHOTOGRAPHY SKILLS

Since this is still a photography project, your ability to take pictures remains crucial. Your unedited images in the Demo Gallery will serve as the reference when evaluating these skills. If you wish to further enhance your photography skills, you can refer to the "4-H Photographer's Field Guide" (page 16).

ETHICAL AWARENESS

It's crucial to be able to tell when editing an image has gone too far. Whenever possible, be transparent about your editing process by providing citations of how you manipulated the image. For more information on this, please visit the next page.

PRESENTATION

Professional presentation of your work is crucial to make a strong impression. High-quality prints, neat labels, legible text, and consistency are all important elements in achieving this.

PRESENTATION TIPS

Being able to present your work professionally and neatly is crucial. It reflects the care and effort you've put into crafting your project. Moreover, it makes a strong first impression on your judge if you submit your project to a county or state fair.

HERE ARE SOME TIPS FOR A STRONG PRESENTATION



TIP: ADDING A COVER PAGE

Although not required, creating a cover for your binder or journal is a great idea! This adds a nice finishing touch to your project.



TIP: CLEAN DISPLAY PHOTO

Your display photo is crucial, so select your best one! When applying your mat, ensure it's clean and flat. Using permanent double-sided tape is recommended. Also, don't forget to add a label to the back of the mat.



TIP: NEAT LEGIBLE LABELS

Ensure your labels are clean and easy to understand. For an extra touch, consider briefly explaining your editing process on each demo page.

EDITING ETHICS

Learning to edit photos is a fun and normal part of photography. However, it can also allow you to manipulate images, which could distort the integrity of your artwork. The goal is not to mislead, but to enhance.

POTENTIAL

Editing your images is not cheating; it can actually be a very powerful way to enhance and make them stand out. However, if you start changing your image into something completely different, it's time to take a step back.

DISCERNMENT

The first skill you need to learn when editing pictures is to determine the line you shouldn't cross. This rule may not be universally applicable, as it could vary depending on the specific photograph. Essentially, you can categorize images into two main groups:

- Documentary: Most images captured fall into this category, including landscapes, portraits, and event images. These images shouldn't be altered to change reality; instead, they should enhance what is already there.
- Artistic: These images are meant to be as creative as possible and may not even be considered real. It's common that these images are more about imagination rather than what is accurate.

HONESTY

Be transparent about your editing process. If you used advanced tools like Photoshop or Al editors, include a short note explaining how you modified the image. Honesty builds trust and shows respect for your viewers.

COPYRIGHT

Remember, your photos are yours, but always exercise caution when incorporating elements that may not belong to you. If you use someone else's textures, artwork, or assets, ensure they are free to use. While fair-use laws may occasionally apply, it's always advisable to verify first.

EDITING ETHICS: FRIENDLY DEBATES

This is an optional experience, but highly recommended.

At your next club meeting, engage in a friendly discussion in one or more of the following scenarios. You can also include what you learned in your record book story.

Scenario #1 — Photojournalist crops image

A photojournalist captures an image of a city protest to be used in a local news article. The selected image, featuring a person holding a sign, is then edited, cropping out part of the sign that alters its meaning. This edited image presents a different narrative compared to the original.

What do you think — was this ethical?

Scenario #2 — Photographer alters commercial image

During a photoshoot for a new clothing line, the photographer desired the model's hair color to be red, but unfortunately, it was blonde. After the shoot, the photographer decided to edit the images to change the model's hair color to red. It's important to note that these edited images are solely intended for advertising purposes with the model's permission.

What do you think — was this ethical?

Scenario #3 — Editor removes distracting element in photo

After a wedding, the photographers hire an editor to work on their images. The editor stumbles upon a breathtaking image of the bride and groom, but unfortunately, there's a distracting person in the background. Recognizing that the person only detracts from the photo's overall impact, the editor decides to remove it from the background. The client also never requested this change.

What do you think — was this ethical?

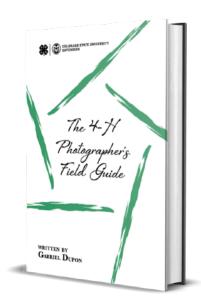
Scenario #4 — 4-H member edits the perfect portrait

The secretary of your 4-H club requested an officer portrait from the historian. However, the secretary was disappointed with the image and asked for some changes. The historian removed blemishes, smoothed the skin, changed her eye color, and even did teeth whitening. While these changes pleased the secretary, they didn't accurately represent the secretary's appearance.

What do you think — was this ethical?

GROWING PHOTOGRAPHY SKILLS

The manual focuses entirely on editing your images, but developing photography skills is still important. If needed, download the following companion book for an enhanced educational experience



THE 4-H PHOTOGRAPHER'S FIELD GUIDE

For the best experience throughout your photography project journey, use the companion manual "The 4-H Photographer's Field Guide" - ISBN 979-8-9895518-0-4. This field guide is provided to you as a digital or a physical paperback copy.

Download the free ebook or purchase the paperback:

gabrieldupon.com/4-h-photography-resources



LEARNING RESOURCES

This manual doesn't include instructions on how to edit your photos because there are numerous editing applications that are constantly changing. However, each company that releases these applications also maintains upto-date user guides that are very helpful.



Adobe Lightroom Classic (preferred)
helpx.adobe.com/lightroom-classic/user-guide.html

Adobe Lightroom Mobile <u>helpx.adobe.com/lightroom-cc/user-guide.html</u>





Adobe Photoshop helpx.adobe.com/photoshop/user-guide.html

Affinity Photo affinity.serif.com/en-us/learn/photo/desktop/





Capture One support.captureone.com

Fotor <u>support.fotor.com</u>





Apple Photos support.apple.com/en-us/guide/photos



CURATE YOUR PROJECT EXPERIENCE FROM THIS LIST OF TECHNIQUES.

YOU DON'T HAVE TO COMPLETE
ALL OF THEM. CHOOSE THE ONES
THAT INTEREST YOU THE MOST.
JUST MAKE SURE TO CREATE
A DEMO GALLERY WITH
FORTY IMAGES.

#1 - COLOR ADJUSTMENTS

DIFFICULTY	2 - Moderate
$II \vdash \Delta D N IN (: (:C) \Delta I$	How to utilize color theory to adjust and enhance the color in your image.

HOW TO ADJUST COLOR

Adjusting the color of an image involves the use of the HSL tools in your editing application. This includes being able to adjust:

- ➡ Hue: The shade of each color.
- **⇒ Saturation:** The intensity of each color.
- **→ Luminance:** The brightness of each color.

Refer to the user guide for detailed instructions on how to effectively utilize these color HSL adjustment tools.

TECHNIQUE INSTRUCTIONS

- 1. Capture a new photo or select a photo from your library. This photo should have a variety of colors. If you need an idea, capture a photo of colored pencils or a bookshelf.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

Color and tone are crucial factors in editing. Additionally, refer to pages 24, 28, and 31 for Tone Adjustments, White Balance, and Color Grading, respectively.

#2 - TONE ADJUSTMENTS

DIFFICULTY	2 - Moderate
LIEADNING GOAL	How to utilize the histogram and adjust different exposure values in your image.

HOW TO ADJUST TONE

Adjusting the tone of an image involves five key factors:

- ➡ Blacks: Absolute darkness (no details seen).
- **⇒ Shadows:** Darkness with details visible.
- **Midtones:** Optimal balance.
- ➡ Highlights: Brightness with details visible.
- **→ Whites:** Absolute brightness (no details seen).

Most editing applications provide both a tone panel with precise sliders for adjustments and a curve panel for artistic control. Refer to the user guide for detailed instructions on how to effectively utilize these tone adjustment tools.

TECHNIQUE INSTRUCTIONS

- 1. Capture a new photo or select a photo from your library. This photo should be dynamic with a variety of shadows and highlights. Photos captured during sunset or sunrise are a good choice.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

Color and tone are crucial factors in editing. Additionally, refer to pages 23, 28, and 31 for Color Adjustments, White Balance, and Color Grading, respectively.

#3 - CREATIVE CROPPING

DIFFICULTY	1 - Easiest
LEARNING GOAL	How to adjust the size, aspect ratio, and straightening of your image.

HOW TO CROP

Cropping is perhaps one of the most basic forms of editing an image. However, it can go beyond your typical crop. Here are all the main adjustments you may find in your editing application:

- **Crop:** Reframes the image by changing its size.
- → Aspect Ratio: The relationship between the length and height of the image. It is essentially the shape of the photo.
- **⇒ Straighten:** Balances the horizon of the image.
- ➡ Geometry: Adjusts distortions and unpleasing angles.

Refer to the user guide for detailed instructions on how to effectively utilize these cropping adjustment tools.

- 1. Capture a new photo or select a photo from your library. This photo should focus on an individual subject. Think about how you can crop your photo that will improve the composition. Would it be possible to force a "rule of thirds" composition rule with this photo?
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

#4 - AI GENERATIVE FILL

DIFFICULTY	2 - Moderate
LEARNING GOAL	How to use AI to ethically manipulate your image for an exciting appearance.

HOW TO USE ARTIFICIAL INTELLIGENCE

Applications powered by Artificial Intelligence (AI) have become incredibly powerful. Complex applications like Photoshop leverage AI, while simpler ones like Fotor and Canva also utilize it. For this section, it's recommended that you refer to the user guide's tutorial and then experiment with the AI features.

The most powerful AI features you'll find are the "generative fill" ones. These features allow you to easily remove and add objects, as well as expand the borders of your image.

- 1. Capture a new photo or select a photo from your library. This photo should have a lot of empty space. A simple wide angle landscape photo is often the easiest to work with, but any type of photo is fine.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

#5 - ERROR CORRECTIONS

DIFFICULTY	2 - Moderate
LEARNING GOAL	How to fix vignettes, lens distortions, and chromatic aberrations.

HOW TO CORRECT ERRORS

Photographs often have unpleasing elements, and we desire to fix them. Most editing applications have features that have the following tools:

- ► Lens Distortions: Fixes the distortion commonly found when using wide-angle lenses.
- ➤ Vignettes: Lenses will often have dark areas around the edge of the image. Brightening up the border will help fix that issue.
- Chromatic Aberrations: Removes unusual coloring found near highcontrast edges in your images.
- Noise Reduction: Reduces the noise patterns commonly found with images captured at high ISO.

Refer to the user guide for detailed instructions on how to effectively utilize these error-correcting tools.

- Capture a new photo or select a photo from your library. This photo should have unsatisfying elements in your image, such as fisheye effect, dark colors around the border, or weird colors around bright objects.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

#6 - WHITE BALANCE

DIFFICULTY	1 - Easiest
LEARNING GOAL	How to make white balance adjustments from RAW image data.

HOW TO ADJUST WHITE BALANCE

White balance, a single slider, can significantly impact the quality of your photos. Measured in Kelvins, it determines the color of light in your image. When you capture an image in JPEG format, it's usually final and cannot be altered. However, when you capture an image in RAW format, your editing application allows you to adjust the white balance temperature from 2,000K to 10,000K. Adjusting white balance requires careful consideration, so take your time to be precise.

TECHNIQUE INSTRUCTIONS

- 1. Capture a new photo or select a photo from your library. This photo can be of any subject, but must be captured in a RAW image file format. Look in your camera settings menu for this option.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

Color and tone are crucial factors in editing. Additionally, refer to pages 23, 24, and 31 for Color Adjustments, Tone Adjustments, and Color Grading, respectively.

#7 - ARTISTIC EFFECTS

DIFFICULTY	1 - Easiest
LEARNING GOAL	How to add filters and other effects to create a fun picture.

HOW TO ADD ARTISTIC EFFECTS

Many applications offer fun features and filters that can enhance your images with artistic effects. While these features can undoubtedly add artistic value, they may also inadvertently remove authentic elements. Therefore, exercise caution when using them. Refer to the user guide for comprehensive instructions on how to apply filters and effects effectively.

- Capture a new photo or select a photo from your library. This photo can be of any subject. If you need an idea, choose a photo that is a little weird or odd. For example, choose a photo of a car at an unusual angle.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

#8 - PHOTO MERGES

DIFFICULTY	3 - Challenging
	How to create panoramas and HDR images by combining multiple photos.

HOW TO MERGE PHOTOS

There are many different ways you can merge multiple photos together. Most applications support photo merging since it is a commonly used technique among landscape photographers. Try one of these popular methods:

- → HDR images: Are created using a tripod to capture three identical images, but with different exposure values. One underexposed, one properly exposed, and one overexposed.
- ▶ Panorama images: Are created by capturing multiple images from a single location. Each image should capture a different part of the scene, with a slight overlap between the previous and subsequent photos.

Refer to the user guide for detailed instructions on how to effectively merge photos together. The process will be different for each method.

- Capture a new photo sequence or select a photo set from your library.
 This photo sequence (2-7 photos) should be ready to be merged.
 Capturing these images may be harder than the actual editing portion of this technique.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

#9 - COLOR GRADING

DIFFICULTY	2 - Moderate
I I FADNIN(; (;()AI	How to convey an emotion by adding color to your photograph.

HOW TO COLOR GRADE

Enhancing your image by adding and adjusting colors to evoke specific emotions is a widely used technique to transform even dull images into visually appealing ones. Refer to the example on page 12 for a demonstration. When utilizing the color grading features in your editing application, you'll typically encounter three color wheels: shadows, midtones, and highlights. These wheels allow you to adjust or add colors to the image, creating a very artistic appearance. For comprehensive instructions on effectively utilizing these color grading tools, refer to the user guide.

TECHNIQUE INSTRUCTIONS

- 1. Capture a new photo or select a photo from your library. This photo can be of anything. It doesn't even need to have much color. The purpose of color grading is about adjusting and adding colors to evoke an emotion.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

Color and tone are crucial factors in editing. Additionally, refer to pages 23, 24, and 28, for Color Adjustments, Tone Adjustments, and White Balance, respectively.

#10 - MASK EDITING

DIFFICULTY	3 - Challenging
LEARNING GOAL	How to edit the color and tone in only specific parts of your image (e.g. only adjusting the sky).

HOW TO EDIT USING MASKS

Masking, arguably one of the most powerful techniques in modern photo editing, enables you to select a specific part of an image and adjust its settings, thereby affecting only that region. Most editing applications provide a masking or layer panel that facilitates the creation of masks. Watching a tutorial can be highly beneficial in effectively learning how to utilize masks within your chosen editing application.

- 1. Capture a new photo or select one from your library. Ensure that the photo contains clearly defined elements like objects, people, landscapes, or skies. In your editing application, you can edit these elements individually. While this process may take longer, it's highly effective in creating an image that truly stands out.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

#11 - RETOUCHING

DIFFICULTY	3 - Challenging
	How to cleanup your image by removing blemishes and objects in your photos.

HOW TO RETOUCH

It's common to take pictures that may have unsatisfying elements, such as distracting objects or blemishes. To remove these elements, you can use the retouching tool in an editing application. This process involves copying a small part of the image and placing it over something you don't want to be visible. For more comprehensive instructions on how to retouch images effectively, refer to the editing application user guide or search for a tutorial.

- 1. Capture a new photo or select a photo from your library. This photo can be any type of photo that includes distracting elements. Portraits are often the best photos to practice with since that is when retouching is most commonly used.
- 2. Edit the photo using your preferred editing application. Refer to the information provided above to search for instructions in the application user guide or to find a tutorial. Alternatively, you can attempt to figure it out yourself for an added challenge!
- 3. Print two photos: one of the original image and one of the edited image. Attach both photos to a single page and label them using the template provided on page 11.

#12 - CUSTOM

Create your own photo editing activity. The pictures you capture and edit from this technique can be included in your Demo Gallery.					
Activity name:					
How challenging was this activity? (circle one)	1	2	3		
What did you learn or discover?					
Explain your editing process:					



4-H MISSION

4-H empowers youth to reach their full potential by working and learning in partnership with caring adults.

4-H VISION

A world in which youth and adults learn, grow, and work together.

4-H PLEDGE

I pledge.....
My head to clearer thinking,
My heart to greater loyalty,
My hands to larger service,
My health to better living
for my club, my community, my country, and my world.

4-H MOTTO

"To Make the Best Better."