Overview

This assignment teaches the importance of using histograms to evaluate exposure in your photographs. By understanding how to interpret histograms and make adjustments in exposure settings, you will enhance your ability to capture well-exposed images in a variety of conditions.

Learning Objectives

- Understand how to read and interpret histograms
- Learn to adjust aperture or shutter speed in priority mode for optimal exposure
- Practice using fixed ISO settings to allow automatic adjustments for exposure

Related Reading

Before you start, read these related blog posts to deepen your understanding:

What Is Dynamic Range In Photography	Exposure Bracketing A Guide For Photographers	Histogram Explained
Exposure Review	Tonal Balance	

Before You Shoot

- ■ Ensure your camera is set to either aperture priority or shutter priority mode
- ■ Set your ISO to a fixed value (ISO 200)
- ■ Familiarize yourself with how to access the histogram display on your camera
- ■ Choose a variety of subjects with different lighting conditions
- ■ Prepare your camera with a fully charged battery and sufficient memory card space

Assignment Tasks

1. Use aperture priority mode at f/2.8 with ISO 200 fixed, letting the camera set shutter speed, and capture a portrait in natural light. Review the histogram for exposure accuracy.
2. Select a moving subject and use shutter priority mode at 1/500s with ISO 200 fixed, allowing the camera to adjust aperture. Capture the subject in action and analyze the histogram for any clipping.
3. Shoot a landscape scene using aperture priority mode at f/8 with ISO 200 fixed. Evaluate the histogram to ensure the sky and foreground are both well-exposed.
4. Capture a low-light scene using shutter priority mode at 1/60s with ISO 200 fixed. Let the camera choose the aperture and check the histogram for potential underexposure.
5. Experiment with a backlit subject using aperture priority at f/4 with ISO 200 fixed. Analyze the histogram to see how highlights are represented and make adjustments as necessary.
6. Photograph a high-contrast scene using shutter priority at 1/250s with ISO 200 fixed. Let the camera adjust aperture and review the histogram for proper exposure across the tonal range.

Stretch Tasks

- Create a series of high dynamic range (HDR) images by shooting multiple exposures in aperture priority mode at f/11 with ISO 200 fixed. Merge these images and evaluate the final histogram.
- Use a scene with both bright and dark elements. Shoot in shutter priority mode at 1/125s with ISO 200 fixed, letting the camera adjust aperture, and then manually adjust exposure compensation based on the histogram feedback.

DO / DON'T

DO

- ✓ Do analyze the histogram after each shot to learn from your exposure decisions
- ✓ Do practice shooting in varying lighting conditions to see how they affect your histogram readings
- ✓ Do keep your ISO fixed to control exposure effectively while using priority modes
- ✓ Do make adjustments based on histogram feedback to improve your exposure skills
- ✓ Do share your histogram results with peers for collaborative learning

DON'T

- ✗ Don't shoot in full manual mode while trying to learn priority settings
- ✗ Don't ignore the histogram; rely solely on your camera's LCD screen for exposure judgment
- ✗ Don't set your ISO to auto; keep it fixed to focus on aperture or shutter adjustments
- ✗ Don't assume that a bright image on the LCD means it is well-exposed without checking the histogram
- ✗ Don't overlook the importance of reviewing the entire tonal range in your histogram

Reflection Questions

- How did understanding the histogram change your approach to exposure?
- What challenges did you encounter while using priority modes for exposure?
- In what scenarios did you find the histogram most helpful for your photography?
- How can you apply what you learned about histograms in future photography sessions?

Technical & Creative Focus

Technical:

- Use the histogram to determine if your images are overexposed or underexposed
- Adjust your aperture or shutter speed while keeping ISO fixed to achieve desired exposure
- Understand the importance of the tonal range in the histogram
- Practice evaluating the histogram after each shot to make real-time adjustments
- Learn to recognize clipping in the histogram and its impact on image quality

Creative:

- Experiment with different apertures to control depth of field while monitoring histogram changes
- Use shutter speed creatively to capture motion while ensuring proper exposure
- Incorporate backlighting and analyze how it affects histogram readings
- Explore high-contrast scenes and adjust settings to balance exposure
- Capture a series of images in varying light conditions and evaluate their histograms