Overview

This assignment teaches students how to effectively use histograms to evaluate exposure and make adjustments based on the feedback provided. By understanding and utilizing exposure review techniques, photographers can enhance their ability to capture well-exposed images in various lighting conditions.

Learning Objectives

- Understand the importance of histograms in evaluating exposure.
- Learn how to adjust exposure settings based on histogram data.
- Gain proficiency in using aperture priority and shutter priority modes.

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

- Familiarize yourself with your camera's histogram display settings.
- Set your camera to either aperture priority or shutter priority mode.
- Fix the ISO to 200 to maintain consistent exposure conditions.
- Identify a variety of subjects that will allow for different exposure challenges.
- Ensure your camera battery is charged and memory card has ample space.

Assignment Tasks

1. Use aperture priority mode at f/4 with ISO 200 fixed, letting the camera set shutter speed, and analyze the histogram for exposure accuracy in a landscape scene.
2. Capture a fast-moving subject in shutter priority mode at 1/1000s with ISO 200 fixed, letting the camera adjust aperture, and review the histogram for highlight clipping.
3. Photograph a portrait in aperture priority mode at f/2.8 with ISO 200 fixed, allowing the camera to set shutter speed, and check the histogram for shadow detail.
4. Shoot a scene with mixed lighting using shutter priority mode at 1/250s with ISO 200 fixed, allowing the camera to adjust aperture, and evaluate the histogram for overall exposure.
5. Create a series of images at different apertures in aperture priority mode while fixing ISO at 200, then analyze the histograms to see how depth of field affects exposure.
6. Capture a scene with intentional overexposure in shutter priority mode at 1/60s with ISO 200 fixed, letting the camera adjust aperture, and review the histogram for highlight clipping.

Stretch Tasks

- Conduct a high dynamic range (HDR) shoot using aperture priority mode at f/8 with ISO 200 fixed, capturing multiple exposures and analyzing histograms for each.
- Experiment with silhouette photography in shutter priority mode at 1/500s with ISO 200 fixed, allowing the camera to set aperture, and evaluate the histogram for underexposure.

DO / DON'T

DO

- ✓ Do analyze your histogram after each shot to understand exposure levels.
- ✓ Do adjust your settings based on histogram feedback for optimal exposure.
- ✓ Do practice shooting in varying lighting conditions to challenge your histogram skills.
- ✓ Do experiment with both aperture and shutter priority modes to see their effects on exposure.
- ✓ Do review your images on a computer to see how histogram data translates to final image quality.

DON'T

- ✗ Don't ignore the histogram; it provides vital information for exposure adjustments.
- ✗ Don't set all three exposure variables manually; use priority modes.
- ✗ Don't hesitate to adjust exposure compensation if the histogram indicates clipping.
- ✗ Don't focus only on the image; take time to analyze the histogram after shooting.
- ✗ Don't forget to check for highlight and shadow detail while reviewing your images.

Reflection Questions

- How did understanding the histogram change your approach to exposure?
- In what situations did you find aperture priority or shutter priority mode more beneficial?
- What challenges did you face while interpreting the histogram?
- How can you apply what you've learned about histograms to future photography projects?

Technical & Creative Focus

Technical:

- Use the histogram to identify clipping points and adjust accordingly.
- Learn the difference between highlight and shadow clipping in the histogram.
- Practice interpreting the histogram's shape to gauge exposure accuracy.
- Utilize exposure compensation to adjust the brightness of your images based on histogram feedback.
- Explore the relationship between histogram data and the resulting image quality.

Creative:

- Experiment with different depth of field effects using aperture priority mode.
- Capture motion blur effects while using shutter priority mode to convey movement.
- Utilize the histogram to find creative ways to expose for shadows or highlights.
- Incorporate varying light sources to see how they affect histogram readings.
- Play with different compositions and observe how they impact exposure readings.