Overview

This assignment focuses on mastering the exposure triangle by utilizing aperture and shutter priority modes. Students will learn how to control depth of field and motion in their photographs while understanding the effects of exposure settings on their images.

Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO in exposure.
- Master the use of aperture and shutter priority modes to achieve desired creative effects.
- Learn to evaluate exposure using histograms and metering modes.

Before You Shoot

■ Familiarize yourself with your camera's exposure settings, specifically aperture and shutter priority modes.

■ Set your camera's ISO to a fixed value of 200.

■ Choose a location with varied lighting conditions to practice exposure settings.

■ Prepare a list of subjects to photograph that demonstrate depth of field or motion.

■ Ensure your camera battery is charged and you have sufficient memory space for images.

Assignment Tasks

1. Use aperture priority mode at f/2.8 with ISO 200 fixed, letting the camera set shutter speed to achieve a shallow depth of field in a portrait shot.

2. Use shutter priority mode at 1/500s with ISO 200 fixed, allowing the camera to adjust aperture to capture a moving subject, such as a runner or cyclist.

3. Set your camera to aperture priority mode at f/8 with ISO 200 fixed, and photograph a landscape scene to achieve maximum depth of field.

4. Use shutter priority mode at 1/60s with ISO 200 fixed to capture a flowing waterfall, allowing the camera to adjust aperture for proper exposure.

5. Set your camera to aperture priority mode at f/4 with ISO 200 fixed and capture indoor scenes with mixed lighting, paying attention to the resulting exposure.

6. Use shutter priority mode at 1/30s with ISO 200 fixed to capture street scenes at dusk, letting the camera adjust the aperture for low light.

Stretch Tasks

- Challenge yourself by combining elements of both priority modes; shoot a sequence of images using both aperture and shutter priority to compare results.
- Create a series of images that highlight different depths of field and motion effects in a single location, documenting your settings for each shot.

DO	DON'T
✓ Do check your histogram after each shot to avoid overexposed highlights and underexposed shadows.	✗ Don't rely solely on automatic mode; focus on using priority modes for creative control.
✓ Do experiment with different focal lengths to see how they affect depth of field.	✗ Don't ignore your histogram; it is essential for understanding exposure.
✓ Do use a tripod for slow shutter speeds to ensure stability and sharp images.	✗ Don't be afraid to adjust exposure compensation if your images are not turning out as expected.
✓ Do practice in varying light conditions to understand how exposure settings change.	✗ Don't shoot in direct sunlight without considering how it affects your exposure settings.
✓ Do take notes on your settings and results to track your progress and learning.	✗ Don't forget to review and adjust your metering mode based on your subject and lighting.

Reflection Questions

- How did using aperture priority change the way you approached depth of field in your photos?
- What challenges did you face when using shutter priority mode for motion capture?
- In what scenarios do you find one priority mode more beneficial than the other?
- How did your understanding of exposure improve through this assignment?

Technical & Creative Focus

Technical:

- Use aperture priority mode to control depth of field while allowing the camera to select the shutter speed.
- Use shutter priority mode to freeze motion, letting the camera determine the aperture.
- Check the histogram after each shot to ensure there are no clipped highlights or shadows.
- Experiment with different metering modes to see how they affect exposure.
- Adjust exposure compensation to correct for tricky lighting situations.

Creative:

- Explore shallow depth of field by using a wide aperture to isolate your subject.
- Capture motion blur by selecting a slow shutter speed to convey movement.
- Use a fast shutter speed to freeze action in dynamic scenes.
- Experiment with backlighting to create dramatic silhouettes.
- Play with foreground elements to enhance depth in your compositions.

Related Reading

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