

## Overview

This assignment focuses on mastering the exposure triangle by utilizing aperture and shutter priority modes to control depth of field and motion. Students will learn to achieve optimal exposure by fixing ISO while allowing their camera to adjust the remaining settings automatically.

## Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO in photography.
- Gain confidence in using aperture priority and shutter priority modes.
- Learn to evaluate exposure using histograms and metering modes.

## Before You Shoot

- Familiarize yourself with your camera's aperture and shutter priority settings.
- Set your camera's ISO to a fixed value of 200.
- Choose a location with varying lighting conditions to test exposure settings.
- Ensure your camera battery is fully charged and memory card has sufficient space.
- Bring a tripod if shooting in low light to stabilize your camera.

## Assignment Tasks

1. Use aperture priority mode at f/2.8 with ISO 200 fixed, allowing the camera to set the shutter speed while photographing a subject with a blurred background.
2. Switch to shutter priority mode at 1/500s with ISO 200 fixed, letting the camera adjust the aperture to freeze the motion of a moving vehicle.
3. Capture a portrait in a well-lit environment using aperture priority mode at f/4, allowing the camera to adjust the shutter speed.
4. Photograph a waterfall using shutter priority mode at 1/30s with ISO 200 fixed, letting the camera choose the aperture to create a silky effect in the water.
5. Use aperture priority mode at f/5.6 with ISO 200 fixed to capture a landscape scene, allowing the camera to select the appropriate shutter speed.
6. In a low-light setting, use shutter priority mode at 1/60s with ISO 200 fixed to capture a street musician, letting the camera adjust the aperture.

## Stretch Tasks

- Experiment with bracketing exposure in both aperture and shutter priority modes to create a series of images with varying exposures.
- Capture a time-lapse sequence using shutter priority mode to focus on changing light conditions throughout the day.

DO	DON'T
<ul style="list-style-type: none"><li>✓ Do ensure your camera is in the correct shooting mode (A or S) before starting.</li><li>✓ Do check your histogram after each shot to assess exposure.</li><li>✓ Do adjust your composition while allowing the camera to set exposure automatically.</li><li>✓ Do take multiple shots of the same scene with different settings to compare results.</li><li>✓ Do practice in different lighting conditions to improve your exposure skills.</li></ul>	<ul style="list-style-type: none"><li>✗ Don't manually set all three exposure variables; use priority modes instead.</li><li>✗ Don't shoot without checking your histogram, risking clipped highlights or shadows.</li><li>✗ Don't be afraid to experiment with different metering modes based on your scene.</li><li>✗ Don't rush your shots; take time to evaluate and adjust your settings.</li><li>✗ Don't forget to pay attention to the surrounding elements that might affect exposure.</li></ul>

## Reflection Questions

- How did using aperture priority mode change your approach to depth of field?
- What challenges did you face when using shutter priority to capture motion?
- In what situations do you find one exposure priority mode more beneficial than the other?
- How does fixing ISO help you focus more on the compositional aspects of your shot?

## Technical & Creative Focus

### Technical:

- Use aperture priority mode to control depth of field for portraits or macro shots.
- Utilize shutter priority mode to capture fast-moving subjects without motion blur.
- Check the histogram after each shot to ensure no highlights or shadows are clipped.
- Experiment with different metering modes (e.g., spot metering) to see their effect on exposure.
- Understand how changing the aperture affects the exposure and depth of field.

### Creative:

- Explore how different apertures can change the mood of your photos.
- Use shutter speed creatively to capture motion blur or freeze action.
- Experiment with backlighting to create silhouettes while maintaining exposure balance.
- Capture the same scene using different exposures to understand how it impacts the image.
- Incorporate leading lines and framing techniques while adjusting aperture or shutter speed.

## Related Reading

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

[What Is Exposure In Photography](#)

[What Is Iso In Photography](#)

[What Is Shutter Speed](#)

[What Is Depth Of Field](#)

[What Is Manual Exposure In Photography](#)

[What Is Dynamic Range In Photography](#)