



## Overview

The Exposure Triangle Mastery assignment focuses on understanding and manipulating the three fundamental elements of exposure: aperture, shutter speed, and ISO. Mastering these elements enables photographers to achieve the desired brightness and mood in their images, ensuring creative expression is accurately conveyed.

## Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO in the exposure triangle.
- Apply manual settings to achieve correct exposure in various lighting conditions.
- Evaluate the impact of different settings on image quality and artistic expression.

## Related Reading

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

<a href="#">What Is Exposure In Photography</a>	<a href="#">What Is Iso In Photography</a>	<a href="#">What Is Shutter Speed</a>
<a href="#">What Is Depth Of Field</a>	<a href="#">What Is Manual Exposure In Photography</a>	<a href="#">What Is Dynamic Range In Photography</a>

## Before You Shoot

- Familiarize yourself with your camera's manual mode and settings.
- Select a location with varying light conditions to test exposure settings.
- Prepare a notebook or digital device to record your settings and outcomes.
- Check your camera's battery and memory card to ensure they are sufficient for the shoot.
- Set your camera to shoot in RAW format for better post-processing flexibility.

## Assignment Tasks

1. Photograph a landscape during golden hour at f/11, 1/125s, ISO 100 to capture vibrant colors and details.
2. Shoot a portrait with a blurred background at f/2.8, 1/200s, ISO 400 to emphasize the subject's features.
3. Capture a fast-moving subject, like a bird in flight, at f/5.6, 1/1000s, ISO 800 to freeze motion effectively.
4. Take a night scene photo at f/4, 1/30s, ISO 1600 to balance light and detail without too much noise.
5. Experiment with long exposure photography at f/16, 30s, ISO 100 to create smooth water effects in a waterfall.
6. Shoot a street scene with varied lighting at f/5.6, 1/250s, ISO 400 to capture the essence of urban life.

## Stretch Tasks

- Create a time-lapse video by capturing images at f/8, 1/100s, ISO 200 over several hours, adjusting settings as light changes.
- Photograph a moving vehicle at night using a slow shutter speed of 1/15s, f/4, ISO 800 to create light trails.



## DO / DON'T

DO	DON'T
<ul style="list-style-type: none"><li>✓ Do experiment with different aperture settings to see their effect on depth of field.</li><li>✓ Do utilize a tripod for long exposure tasks to maintain stability and sharpness.</li><li>✓ Do analyze your histogram after each shot to ensure proper exposure.</li><li>✓ Do practice shooting in manual mode to gain full control over the exposure triangle.</li><li>✓ Do review your settings and outcomes regularly to identify patterns and improve.</li></ul>	<ul style="list-style-type: none"><li>✗ Don't rely solely on automatic settings; learn to use manual settings for better control.</li><li>✗ Don't ignore the importance of a good metering mode for accurate exposure.</li><li>✗ Don't forget to check your white balance settings, as they can affect the mood of your images.</li><li>✗ Don't shoot in low light without stabilizing your camera or using a higher ISO.</li><li>✗ Don't dismiss the importance of exposure compensation when shooting in challenging lighting.</li></ul>

## Reflection Questions

- How did changing the aperture affect the overall exposure and mood of your images?
- What challenges did you encounter when adjusting shutter speed in different lighting conditions?
- In what ways did your understanding of ISO influence your creative choices?
- How did using exposure compensation change the outcome of your photographs?

## Technical & Creative Focus

### Technical:

- Use manual mode (M) to control aperture (f/4), shutter speed (1/250s), and ISO (200) for balanced exposure in daylight.
- Experiment with aperture priority mode (Av) at f/2.8, allowing the camera to adjust shutter speed, typically around 1/500s, while keeping ISO at 100 in bright conditions.
- In low light, switch to shutter priority mode (Tv) at 1/60s, set ISO to 1600, and adjust aperture to f/5.6 for a well-exposed image.
- Utilize spot metering to focus on a specific subject, setting your camera to f/5.6, 1/125s, ISO 400 to capture details in both highlights and shadows.
- Employ exposure compensation (+1 EV) while in aperture priority mode at f/8, 1/60s, ISO 800 to brighten images in backlit situations.

### Creative:

- Explore shallow depth of field by shooting at f/1.8, isolating your subject against a blurred background.
- Capture motion blur by setting a slower shutter speed of 1/30s while panning with a moving subject at f/4, ISO 400.
- Experiment with high dynamic range (HDR) by taking three bracketed exposures at f/8, ISO 100, using shutter speeds of 1/250s, 1/60s, and 1/15s.
- Create a starburst effect by using a small aperture (f/16) and a shutter speed of 1/200s, ISO 200 while photographing lights at night.



- Utilize the inverse exposure triangle concept by adjusting ISO first, then aperture and shutter speed to achieve the desired exposure creatively.