



Overview

Mastering the Exposure Triangle is essential for photographers to manipulate light effectively, ensuring images are neither overexposed nor underexposed. By understanding the interplay between aperture, shutter speed, and ISO, photographers can achieve desired brightness and mood in their images.

Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO in the exposure triangle.
- Apply exposure triangle principles to achieve correct exposure in various lighting conditions.
- Utilize metering modes and histograms to assess exposure and make informed adjustments.

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

Before You Shoot

- Familiarize yourself with your camera's manual settings, including how to adjust aperture, shutter speed, and ISO.
- Set your camera to manual mode to gain full control over the exposure triangle.
- Choose an appropriate metering mode based on the shooting environment (e.g., evaluative, spot, or center-weighted).
- Check the histogram settings on your camera to ensure proper exposure assessment.
- Prepare a list of potential shooting conditions and scenarios to practice exposure adjustments.

Assignment Tasks

1. Capture a portrait using aperture priority mode at f/2.8, 1/125s, ISO 200 to achieve a soft background blur.
2. Photograph a moving subject in shutter priority mode set to 1/500s, aperture f/4, ISO 400 to freeze the action.
3. Take a landscape shot using manual mode with settings f/11, 1/125s, ISO 100 to ensure sharpness throughout the image.
4. Shoot a night scene using long exposure; set your camera to f/16, 15s, ISO 100, using a tripod to avoid camera shake.
5. Experiment with a backlit subject by setting your camera to f/5.6, 1/250s, ISO 400, adjusting exposure compensation to -1 stop.
6. Capture a scene with high dynamic range using bracketing; set f/8, 1/60s, ISO 200 for the base shot, then adjust shutter speed for over and underexposed versions.

Stretch Tasks

- Create a time-lapse sequence using interval shooting with settings f/8, 1/30s, ISO 100 to capture changing light conditions over time.
- Use ND filters to shoot at f/4, 1/15s, ISO 200 in bright sunlight to achieve a longer exposure while maintaining correct exposure.



DO / DON'T

DO

- ✓ Do practice adjusting the exposure triangle settings in various lighting conditions to understand their effects.
- ✓ Do check your histogram after every shot to ensure you are not clipping highlights or shadows.
- ✓ Do experiment with different metering modes to see how they affect exposure in complex lighting situations.
- ✓ Do take notes of your settings and results to analyze what works best for different scenarios.
- ✓ Do utilize a tripod for long exposures to maintain stability and sharpness.

DON'T

- ✗ Don't rely solely on automatic settings; learn how to manipulate each component of the exposure triangle.
- ✗ Don't ignore the importance of white balance; set it manually to match the lighting conditions.
- ✗ Don't shoot in low light without considering the trade-offs between aperture, shutter speed, and ISO.
- ✗ Don't forget to check your camera's exposure compensation settings before taking a shot.
- ✗ Don't be afraid to experiment; trial and error is a valuable part of mastering the exposure triangle.

Reflection Questions

- How does changing the aperture affect both exposure and depth of field in your images?
- What challenges do you face when trying to balance the exposure triangle in different lighting conditions?
- How does understanding the exposure triangle enhance your creative vision as a photographer?
- In what scenarios do you find yourself adjusting ISO more frequently than aperture or shutter speed?

Technical & Creative Focus

Technical:

- Use aperture priority mode to control depth of field; set aperture to f/4, shutter speed to auto, ISO 200 for portraits in natural light.
- Use shutter priority mode to freeze motion; set shutter speed to 1/500s, aperture to f/5.6, ISO 400 for action shots.
- In low light conditions, use a wide aperture of f/2.8, shutter speed of 1/60s, ISO 1600 to maintain exposure without blur.
- Experiment with ISO settings; set ISO 100, aperture to f/11, shutter speed to 1/125s for landscape photography in bright conditions.
- Utilize exposure compensation in manual mode; set aperture to f/8, shutter speed to 1/250s, ISO 400, and adjust compensation to -1 stop for backlit subjects.

Creative:

- Experiment with shallow depth of field (f/2.8) to create a dreamy background in portraits.
- Use a slow shutter speed (1/4s) to capture motion blur in flowing water, adjusting ISO to 100 for proper exposure.
- Incorporate high ISO settings (ISO 3200) in low-light environments to capture candid moments without flash.
- Create silhouettes by underexposing (f/11, 1/100s, ISO 200) your subject against a bright background.
- Utilize long exposure techniques (f/16, 10s, ISO 100) to capture light trails at night, ensuring stability with a tripod.