Overview

Mastering the Exposure Triangle is essential for photographers looking to control light effectively in their images. By understanding the interplay between aperture, shutter speed, and ISO, you can achieve the desired brightness, depth of field, and motion blur, ultimately enhancing your photographic storytelling.

Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO in the exposure triangle.
- Apply different camera settings to achieve specific exposure effects in various lighting conditions.
- Evaluate exposure using histograms and metering modes to ensure optimal image quality.

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 and modes.
- Check that your lens is clean and free of dust or smudges.
- Set your camera to manual mode for full control over exposure settings.
- Choose a metering mode (spot, center-weighted, or evaluative) suitable for your scene.
- Prepare your shooting environment by assessing the available light and potential reflections.

Assignment Tasks

1. Photograph a portrait using f/2.8, 1/125s, ISO 200 in aperture priority mode to achieve a soft background blur.

2. Capture a fast-moving subject at f/4, 1/500s, ISO 400 in shutter priority mode to freeze the action.

3. Shoot a landscape scene at f/11, 1/60s, ISO 100 in manual mode to ensure sharpness from foreground to background.

4. Create a nighttime cityscape using f/4, 10s, ISO 800 in manual mode to capture light trails and details.

5. Photograph a backlit subject at f/5.6, 1/200s, ISO 200 in manual mode, adjusting exposure compensation to +1 to prevent silhouette.

6. Try low-light street photography at f/1.4, 1/50s, ISO 1600 in aperture priority mode to capture ambient light and details.

Stretch Tasks

- Create a time-lapse sequence using f/8, 1/30s, ISO 100 in manual mode, adjusting settings as light changes.
- Experiment with long exposure photography at f/16, 30s, ISO 100 while using a tripod to capture star trails.

DO / DON'T

DO	DON'T
✓ Do practice adjusting settings quickly to adapt to changing light conditions.	✗ Don't rely solely on automatic settings; practice using manual controls.
✓ Do use a tripod for long exposure shots to avoid camera shake.	✗ Don't ignore the histogram; it provides crucial information about exposure.
✓ Do check your histogram after each shot to ensure proper exposure.	✗ Don't forget to adjust ISO based on lighting conditions to avoid noise.
✓ Do experiment with different metering modes to understand their effects on exposure.	✗ Don't shoot in low light without stabilizing your camera; use a tripod.
✓ Do review and analyze your images to learn from exposure mistakes.	✗ Don't hesitate to bracket exposures to find the best settings in tricky lighting.

Reflection Questions

- How does changing one element of the exposure triangle affect the others?
- What challenges did you face while mastering exposure settings in different environments?
- In what scenarios do you prefer using manual mode versus aperture or shutter priority?
- How can understanding the exposure triangle enhance your creative vision in photography?

Technical & Creative Focus

Technical:

- Use aperture priority mode (Av or A) and set your aperture to f/5.6 to achieve a balanced depth of field while allowing sufficient light in.
- Experiment with shutter speed by setting it to 1/250s to freeze motion in bright daylight, ensuring ISO remains at 100.
- Adjust ISO to 1600 in low-light conditions while using a wide aperture of f/2.8 and a shutter speed of 1/60s to maintain exposure.
- In manual mode, set your camera to f/8, 1/125s, ISO 200 for landscape photography, ensuring sharp details throughout the image.
- Utilize exposure compensation by adjusting it to +1 stop in backlit scenarios to prevent underexposure of your subject.

Creative:

- Explore shallow depth of field by shooting at f/1.8 to create a blurred background that emphasizes your subject.
- Capture motion blur by using a slow shutter speed of 1/30s while panning with a moving subject to convey movement.
- Experiment with high dynamic range (HDR) photography by bracketing three exposures at f/4, 1/100s, ISO 100; f/4, 1/400s, ISO 100; and f/4, 1/25s, ISO 100.
- Use a neutral density filter to allow for longer exposures (e.g., f/11, 1s, ISO 100) during daylight, creating smooth water effects.
- Incorporate silhouettes by exposing for the background at f/16, 1/500s, ISO 200, ensuring your subject remains dark.