Overview

Mastering the Exposure Triangle is essential for photographers to control brightness, detail, and mood in their images. This assignment focuses on practical tasks that enhance your understanding of how aperture, shutter speed, and ISO interact to create perfect exposure in various shooting conditions.

Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO.
- Apply exposure compensation effectively in different lighting situations.
- Utilize metering modes to achieve correct exposure in complex scenes.

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.
- ■ Set your camera to manual mode to gain full control over the exposure triangle.
- ■ Check your battery level and memory card space before starting the assignment.
- ■ Select a variety of scenes with different lighting conditions for practice.
- ■ Prepare a notebook or digital device to record your settings and observations.

Assignment Tasks

1. Photograph a moving subject at f/4, 1/500s, ISO 100 in manual mode to freeze the action.

2. Capture a portrait using f/2.8, 1/100s, ISO 200 in aperture priority mode to create a soft background blur.

3. Shoot a landscape at f/11, 1/250s, ISO 100 in manual mode to achieve sharpness from foreground to background.

4. Experiment with indoor lighting by shooting at f/4, 1/60s, ISO 1600 in shutter priority mode to maintain detail in low light.

5. Create a silhouette by shooting against the sunset at f/8, 1/200s, ISO 400, adjusting exposure compensation to -2 stops.

6. Capture night scenes with f/2.8, 1/15s, ISO 3200 in manual mode to retain detail in low light conditions.

Stretch Tasks

- Create a time-lapse sequence by adjusting your settings to f/8, 1/60s, ISO 100, capturing multiple frames over a period of time.
- Photograph a fast-moving subject at f/2.8, 1/1000s, ISO 200 while using continuous shooting mode to capture the perfect moment.

DO / DON'T

DO	DON'T
✓ Do familiarize yourself with your camera's exposure compensation feature.	✗ Don't rely solely on automatic settings; practice manual control to understand the exposure triangle.
✓ Do practice adjusting settings quickly to adapt to changing light conditions.	✗ Don't ignore the impact of lighting; always assess your environment before shooting.
✓ Do use a tripod for long exposure shots to avoid camera shake.	✗ Don't rush your settings; take time to adjust for the best exposure.
✓ Do review your histogram after each shot to ensure proper exposure.	✗ Don't use high ISO settings without reason; it can introduce unwanted noise.
✓ Do experiment with different metering modes to see how they affect your exposure.	✗ Don't forget to check for clipping in highlights and shadows using your camera's histogram.

Reflection Questions

- How did adjusting your aperture affect the depth of field in your images?
- What challenges did you face when balancing shutter speed and ISO in low light?
- How did the use of different metering modes change your approach to exposure?
- What creative effects did you achieve by manipulating the exposure triangle?

Technical & Creative Focus

Technical:

- Use aperture priority mode at f/5.6, 1/60s, ISO 200 in bright daylight to achieve a balanced exposure.
- In low light, switch to manual mode and set your camera to f/2.8, 1/30s, ISO 800 to capture more detail without motion blur.
- Experiment with shutter speed by shooting at f/8, 1/500s, ISO 100 to freeze motion in a fast-moving subject.
- Adjust your ISO settings in a dimly lit environment to f/4, 1/15s, ISO 1600 to maintain clarity without introducing too much noise.
- Implement spot metering while shooting at f/2.8, 1/125s, ISO 400 to ensure accurate exposure on your subject.

Creative:

- Use a shallow depth of field (f/2.8) to isolate your subject from the background in portrait photography.
- In landscape photography, set a higher f-stop (f/16) to achieve a greater depth of field, ensuring foreground and background are in focus.
- Create a motion blur effect by using a slow shutter speed (1/4s) while panning with a moving subject.
- Capture the golden hour by adjusting your settings to f/5.6, 1/200s, ISO 400 to enhance warm tones in your images.
- Experiment with high dynamic range (HDR) photography by bracketing exposures using f/8, 1/100s, ISO 200 and adjusting exposure compensation.