Overview

Mastering the Exposure Triangle is crucial for photographers seeking to achieve optimal brightness, detail, and mood in their images. This assignment will guide you through practical tasks that enhance your understanding of aperture, shutter speed, and ISO, enabling you to create well-exposed photographs in diverse lighting conditions.

Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO in the exposure triangle.
- Apply specific camera settings to achieve desired exposure in various scenarios.
- Evaluate and adjust exposure using metering modes and histograms.

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.
- ■ Ensure your camera is fully charged and has sufficient memory space.
- ■ Select a suitable lens for the type of photography you plan to practice.
- ■ Choose a location with varying light conditions to test your exposure settings.
- ■ Set your camera to manual mode to gain full control over your exposure settings.

Assignment Tasks

1. Capture a portrait in natural light at f/2.8, 1/125s, ISO 100 in manual mode to emphasize the subject against a blurred background.

2. Photograph a moving car at f/4, 1/500s, ISO 200 in shutter priority mode to freeze the motion and achieve clarity.

3. Shoot a landscape at f/11, 1/60s, ISO 100 in aperture priority mode to ensure depth of field and sharpness throughout the scene.

4. Create a night scene using a long exposure at f/8, 15s, ISO 400 in manual mode to capture light trails.

5. Experiment with a low light environment by setting your camera to f/4, 1/30s, ISO 1600 in aperture priority mode to maintain detail.

6. Capture a sunset at f/5.6, 1/200s, ISO 100 in manual mode, adjusting exposure compensation to prevent highlights from clipping.

Stretch Tasks

- Create a time-lapse series by adjusting settings every few minutes to reflect changing light conditions, starting at f/8, 1/125s, ISO 100.
- Photograph a high-contrast scene using HDR techniques by taking three exposures at f/5.6, 1/1000s, ISO 100, f/5.6, 1/250s, ISO 100, and f/5.6, 1/60s, ISO 100.

DO / DON'T

DO	DON'T
✓ Do practice in various lighting conditions to understand exposure adjustments.	✗ Don't rely solely on automatic settings; practice manual adjustments.
✓ Do review your histogram after each shot to ensure proper exposure.	✗ Don't ignore the histogram; it provides valuable insights into exposure.
✓ Do experiment with different metering modes to see their effects on exposure.	✗ Don't shoot in overly bright conditions without adjusting your settings.
✓ Do keep notes on your settings for future reference and improvement.	✗ Don't forget to check your lens for cleanliness before shooting.
✓ Do challenge yourself with different subjects to apply your exposure knowledge.	✗ Don't hesitate to bracket exposures when uncertain about lighting.

Reflection Questions

- How did different aperture settings affect the depth of field in your images?
- What challenges did you encounter when adjusting shutter speed for motion?
- How did ISO adjustments impact the quality of your photos in low light?
- In what ways did metering modes influence your exposure decisions?

Technical & Creative Focus

Technical:

- Use aperture settings to control depth of field: Shoot at f/2.8, 1/125s, ISO 100 in manual mode for portraits to achieve a blurred background.
- Adjust shutter speed to freeze or blur motion: Capture a moving subject at f/5.6, 1/1000s, ISO 400 in shutter priority mode to freeze action.
- Manipulate ISO to manage noise: Shoot in low light at f/4, 1/60s, ISO 1600 in manual mode to avoid camera shake while maintaining quality.
- Utilize white balance settings to enhance color accuracy: Set to 'Cloudy' for outdoor shots at f/8, 1/250s, ISO 200 to warm up the image.
- Experiment with metering modes: Use spot metering at f/5.6, 1/125s, ISO 400 to ensure the subject is correctly exposed in challenging lighting.

Creative:

- Explore creative depth of field by shooting at f/1.8 to isolate your subject.
- Incorporate motion blur artistically by using a slow shutter speed of 1/8s while panning with your subject.
- Create high dynamic range images by bracketing exposures at f/4, 1/1000s, ISO 100 and f/4, 1/30s, ISO 100.
- Use backlighting to create silhouettes by exposing for the bright background at f/8, 1/250s, ISO 200.
- Experiment with different light sources and their effects on exposure by shooting at various times of the day with consistent settings.