Overview

Mastering the Exposure Triangle is essential for photographers who want to gain full control over their images. This assignment will guide you through practical tasks that enhance your understanding of how aperture, shutter speed, and ISO interact to create well-exposed photographs.

Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO in achieving correct exposure.
- Apply different exposure settings in various lighting conditions to master the exposure triangle.
- Evaluate and adjust exposure settings 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

- ■ Ensure your camera is fully charged and has enough memory space.
- ■ Familiarize yourself with your camera's manual settings and modes.
- ■ Select a location with varying light conditions to test exposure settings.
- ■ Prepare a notebook or digital device to record your settings and results.
- ■ Set your camera to RAW format for maximum editing flexibility.

Assignment Tasks

1. Capture a landscape scene at f/8, 1/125s, ISO 100 in aperture priority mode to achieve a deep depth of field.

2. Photograph a moving subject (e.g., a cyclist) at f/5.6, 1/500s, ISO 200 in shutter priority mode to freeze the action.

3. Shoot a low-light portrait at f/2.8, 1/60s, ISO 800 in manual mode to maintain detail and achieve a soft background.

4. Create a long exposure of flowing water at f/16, 2s, ISO 100 using a tripod and manual mode to capture smooth motion.

5. Take a series of images at different ISO settings (e.g., ISO 100, 400, 1600) while keeping aperture and shutter speed constant to evaluate noise levels.

6. Experiment with backlighting by shooting a silhouette at f/11, 1/250s, ISO 200 in manual mode to enhance the subject's outline.

Stretch Tasks

- Create a high dynamic range (HDR) image by taking three bracketed shots at f/8, 1/200s, ISO 100, 1/50s, and 1/800s.
- Experiment with low ISO settings (e.g., ISO 50) and long exposures (e.g., 30s) at f/22 to capture star trails.

DO / DON'T

DO	DON'T
✓ Do experiment with different combinations of aperture, shutter speed, and ISO in various lighting conditions.	✗ Don't rely solely on automatic modes; practice manual adjustments to understand exposure better.
✓ Do review your images on the camera's LCD to check for exposure accuracy.	✗ Don't forget to check your histogram to avoid blown highlights or lost shadows.
✓ Do keep a log of your settings and results to track your learning progress.	✗ Don't be afraid to experiment with extreme settings to see their effects on your images.
✓ Do practice using different metering modes to see how they affect your exposure.	✗ Don't overlook the importance of white balance in relation to exposure.
✓ Do use a tripod when shooting long exposures to avoid camera shake.	✗ Don't forget to adjust your settings based on changing light conditions throughout your shoot.

Reflection Questions

- How did different aperture settings affect the depth of field in your images?
- What challenges did you face when trying to achieve the correct exposure?
- How did your understanding of the exposure triangle evolve through this assignment?
- In what scenarios would you prioritize one element of the exposure triangle over the others?

Technical & Creative Focus

Technical:

- Use the histogram to evaluate exposure; aim for a balanced histogram without clipping highlights or shadows.
- Experiment with different metering modes (spot, center-weighted, evaluative) to see how they affect exposure.
- Practice using manual mode to gain confidence in adjusting aperture, shutter speed, and ISO simultaneously.
- Utilize exposure compensation to fine-tune your settings in tricky lighting situations.
- Understand the impact of depth of field by adjusting aperture settings and observing the changes in background blur.

Creative:

- Use a wide aperture (e.g., f/2.8) to create a shallow depth of field for portraits.
- Experiment with slow shutter speeds (e.g., 1/4s) to capture motion blur in moving subjects.
- Incorporate high ISO settings (e.g., ISO 1600) to shoot in low light while managing noise levels.
- Explore the effects of different shutter speeds on water movement (e.g., 1/1000s for freezing action vs. 2s for smooth water).
- Utilize bracketing techniques to capture multiple exposures and blend them in post-processing.