Overview

Mastering the Exposure Triangle is essential for photographers seeking to achieve precise control over light, depth of field, and motion in their images. This assignment will guide you through practical tasks that enhance your understanding of aperture, shutter speed, and ISO, ultimately improving your photographic skills.

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 lighting conditions.
- 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 and modes.
- ■ Check and clean your lens to avoid any optical interference.
- ■ Prepare a variety of scenes with different lighting conditions for practice.
- ■ Ensure your camera battery is fully charged and you have sufficient memory card space.
- ■ Set your camera to RAW format to maximize post-processing flexibility.

Assignment Tasks

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

2. Photograph a moving subject, such as a cyclist, at f/5.6, 1/1000s, 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 both foreground and background are sharp.

4. Experiment with low-light conditions by setting f/4, 1/30s, ISO 1600 in manual mode to capture indoor events without flash.

5. Create a dramatic sunset image using f/8, 1/15s, ISO 100 in manual mode, adjusting exposure compensation to enhance colors.

6. Capture a night scene with f/2.8, 10s, ISO 800 in manual mode to achieve star trails while ensuring proper exposure.

Stretch Tasks

- Create a time-lapse video using f/11, 1/30s, ISO 100 in manual mode, adjusting settings throughout the day to maintain exposure.
- Photograph a scene with mixed lighting conditions, using f/5.6, 1/250s, ISO 400 in manual mode, and adjusting white balance for accuracy.

DO / DON'T

DO	DON'T
✓ Do experiment with different combinations of aperture, shutter speed, and ISO to see their effects on exposure.	✗ Don't rely solely on automatic settings; learn to use manual or priority modes for better control.
✓ Do use a tripod for long exposure shots to ensure stability and sharpness.	✗ Don't ignore the importance of metering modes; choose the appropriate mode for your scene.
✓ Do regularly check your histogram to evaluate exposure and avoid clipping highlights or shadows.	✗ Don't forget to adjust your ISO when changing lighting conditions to maintain proper exposure.
✓ Do practice shooting in various lighting conditions to become familiar with how the exposure triangle behaves.	✗ Don't use the same settings for every shot; adapt your settings based on the scene and desired outcome.
✓ Do review and analyze your images to learn from exposure mistakes and successes.	✗ Don't skip post-processing; use software to fine-tune exposure and enhance the final image.

Reflection Questions

- How does adjusting the aperture affect both exposure and the depth of field in your images?
- What challenges did you face while trying to balance shutter speed and motion in your photographs?
- In what situations did you find yourself needing to adjust ISO, and how did it impact your images?
- How did using different metering modes change your approach to exposure in various scenes?

Technical & Creative Focus

Technical:

- Utilize aperture settings to control depth of field; for instance, shoot at f/2.8 for a shallow depth of field in portrait photography.
- Adjust shutter speed to freeze motion; use 1/1000s when capturing fast-moving subjects like sports.
- Manipulate ISO settings to enhance low-light performance; set ISO 1600 for indoor events without a flash.
- Experiment with white balance settings to achieve accurate color representation; set it to 'Daylight' for outdoor shooting.
- Use evaluative metering mode to assess the overall scene exposure, adjusting settings accordingly.

Creative:

- Explore the creative effects of a wide aperture (e.g., f/1.8) to create a dreamy bokeh effect in your images.
- Experiment with long exposure times (e.g., 2 seconds) to capture motion blur in waterfalls or traffic.
- Play with high ISO settings (e.g., ISO 3200) to introduce grain for a dramatic effect in night photography.
- Combine shutter speed and aperture creatively; shoot at f/11, 1/30s, ISO 100 to capture landscape details with motion in clouds.
- Use exposure compensation to creatively overexpose or underexpose your images depending on the mood you want to convey.