



Overview

Mastering the Exposure Triangle is essential for photographers to achieve the desired brightness, detail, and mood in their images. This assignment will guide you through practical tasks that enhance your understanding of how aperture, shutter speed, and ISO interact to create the perfect exposure.

Learning Objectives

- Understand the relationship between aperture, shutter speed, and ISO in the exposure triangle.
- Apply manual settings to achieve desired exposure in various lighting conditions.
- Utilize metering modes and histograms to evaluate exposure accuracy.

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.
- Ensure your camera battery is fully charged and memory card is empty.
- Set your camera to manual mode to practice full control over exposure settings.
- Choose a scene with varying light conditions to challenge your exposure skills.
- Prepare a notebook or digital device to record your settings and observations.

Assignment Tasks

1. Capture a landscape scene at f/8, 1/125s, ISO 200 in manual mode to achieve a balanced exposure with good depth of field.
2. Photograph a moving subject (e.g., a cyclist) at f/4, 1/500s, ISO 400 in shutter priority mode to freeze the motion.
3. Take a portrait in natural light at f/2.8, 1/200s, ISO 100 in aperture priority mode to create a soft background blur.
4. Shoot a low-light scene (e.g., indoors) at f/4, 1/60s, ISO 1600 in manual mode to maintain detail while avoiding motion blur.
5. Create a silhouette by photographing a subject against a sunset at f/11, 1/2000s, ISO 100 in manual mode to underexpose the subject.
6. Experiment with a long exposure (e.g., f/16, 15s, ISO 100) to capture light trails from cars at night in manual mode.

Stretch Tasks

- Create a series of images using bracketing (e.g., f/4, 1/250s, ISO 200; f/4, 1/125s, ISO 200; f/4, 1/60s, ISO 200) to capture a high dynamic range scene.
- Challenge yourself to shoot a complete series of images only using a fixed aperture (e.g., f/5.6) while varying shutter speed and ISO to maintain exposure.



DO / DON'T

DO

- ✓ Do experiment with different metering modes to see how they affect your exposure.
- ✓ Do take notes on your settings for each shot to understand what works and what doesn't.
- ✓ Do review your histogram after each shot to ensure you're not clipping highlights or shadows.
- ✓ Do practice shooting in different lighting conditions to enhance your adaptability.
- ✓ Do share your images with peers for constructive feedback on exposure.

DON'T

- ✗ Don't rely solely on automatic modes; practice using manual settings for better control.
- ✗ Don't ignore the importance of white balance; adjust it according to your lighting conditions.
- ✗ Don't shoot at extremely high ISO without considering the noise it introduces.
- ✗ Don't forget to check your shutter speed to avoid motion blur in fast-moving subjects.
- ✗ Don't dismiss the histogram; it's a valuable tool for assessing exposure accuracy.

Reflection Questions

- What challenges did you face while adjusting the exposure settings for different scenes?
- How did your understanding of the exposure triangle evolve through this assignment?
- In what ways did the metering modes influence your exposure decisions?
- How did the results of your images differ when using varying ISO settings?
- What creative opportunities did you discover while manipulating aperture and shutter speed?

Technical & Creative Focus

Technical:

- Use spot metering to measure light on your subject and adjust your exposure settings accordingly.
- Experiment with different apertures (e.g., f/2.8, f/5.6) to see how depth of field affects your images.
- Adjust shutter speed (e.g., 1/60s, 1/1000s) to freeze or blur motion, depending on your creative vision.
- Set your ISO to a low value (e.g., ISO 100) for bright conditions and increase it (e.g., ISO 1600) in low light.
- Utilize exposure compensation to fine-tune your exposure in challenging lighting situations.

Creative:

- Experiment with wide apertures (e.g., f/1.8) for portraits to create a soft background blur.
- Use a slow shutter speed (e.g., 1/30s) to capture motion blur in moving subjects like flowing water.
- Incorporate high ISO settings (e.g., ISO 3200) to shoot in low-light environments while accepting some noise.
- Explore the effects of varying shutter speeds on moving subjects to convey different emotions.
- Play with backlighting by adjusting your exposure settings to highlight your subject against a bright background.