



Overview

Mastering the Exposure Triangle is essential for photographers to achieve the desired brightness and detail in their images. This assignment will guide you through practical exercises that enhance your understanding of how aperture, shutter speed, and ISO work together to create well-exposed photographs.

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.
- Analyze exposure through metering modes and histograms to avoid clipping highlights and shadows.

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 battery is fully charged and you have enough storage space.
- Select a suitable lens for the type of photography you will be practicing.
- Set your camera to manual or priority mode to gain full control over exposure settings.
- Choose a metering mode that fits your shooting environment, such as spot or evaluative metering.

Assignment Tasks

1. Photograph a landscape scene at f/11, 1/125s, ISO 100 in manual mode to achieve a deep depth of field and sharp details throughout the image.
2. Capture a moving subject, such as a running dog, at f/4, 1/1000s, ISO 200 in shutter priority mode to freeze the action.
3. Take a portrait at f/2.8, 1/200s, ISO 400 in aperture priority mode to create a soft background blur while keeping your subject in sharp focus.
4. Shoot an indoor scene with low light at f/2.0, 1/60s, ISO 1600 in manual mode to maintain brightness without excessive noise.
5. Experiment with long exposure by shooting at f/16, 30s, ISO 100 in manual mode to create a smooth water effect in a waterfall scene.
6. Capture a street scene during dusk at f/5.6, 1/80s, ISO 800 in aperture priority mode to balance ambient light with artificial light sources.

Stretch Tasks

- Create a time-lapse video using varying exposure settings for different lighting conditions, adjusting aperture, shutter speed, and ISO accordingly.
- Combine multiple exposures in post-processing to create a surreal image that showcases the full dynamic range of the scene.



DO / DON'T

DO

- ✓ Do review your histogram after each shot to check for exposure accuracy.
- ✓ Do practice shooting in different lighting conditions to understand how the exposure triangle adjusts.
- ✓ Do experiment with different metering modes to see how they affect exposure.
- ✓ Do take notes on your settings and outcomes for future reference.
- ✓ Do challenge yourself to shoot in manual mode to gain full control over exposure.

DON'T

- ✗ Don't rely solely on automatic settings; practice manual adjustments for better learning.
- ✗ Don't ignore your camera's metering mode; it can greatly influence your exposure outcome.
- ✗ Don't shoot at the highest ISO without necessity; it can introduce unwanted noise.
- ✗ Don't forget to check your white balance settings before shooting in varying light conditions.
- ✗ Don't be afraid to bracket your exposures to ensure you capture the best possible shot.

Reflection Questions

- How did adjusting your aperture affect the depth of field in your images?
- What challenges did you encounter when balancing shutter speed and ISO?
- In what scenarios did you find exposure compensation most useful?
- How did different metering modes impact your exposure results?

Technical & Creative Focus

Technical:

- Use aperture settings to control depth of field; for example, shoot at f/4.0, 1/60s, ISO 200 in manual mode to achieve a balanced exposure with a slightly blurred background.
- Adjust shutter speed to freeze motion; for instance, set your camera to f/8, 1/500s, ISO 100 in shutter priority mode to capture a fast-moving subject clearly.
- Experiment with ISO settings to manage low light; shoot at f/2.8, 1/30s, ISO 1600 in manual mode to brighten your image without introducing too much noise.
- Utilize exposure compensation to adjust for tricky lighting; set your camera to f/5.6, 1/125s, ISO 400 in aperture priority mode and apply +1 stop compensation for brighter images.
- Understand the importance of white balance in exposure; set your camera to f/5.0, 1/60s, ISO 800 with a custom white balance to ensure accurate color representation.

Creative:

- Use a wide aperture to create a dreamy bokeh effect in portraits, enhancing subject isolation.
- Play with slow shutter speeds to capture motion blur in landscapes, conveying a sense of movement.
- Incorporate high ISO settings to experiment with grainy textures that add character to your images.
- Explore backlighting techniques by shooting with the sun behind your subject to create dramatic silhouettes.
- Utilize bracketing to capture multiple exposures for HDR photography, ensuring detail in shadows and highlights.