



Overview

The Exposure Triangle Mastery assignment focuses on understanding and applying the fundamental components of exposure: aperture, shutter speed, and ISO. By mastering these elements, photographers can achieve the desired brightness, detail, and mood in their images, enhancing their overall photographic skills.

Learning Objectives

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

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.
- Set your camera to manual mode to have full control over exposure settings.
- Choose a suitable lens for your subject matter, considering maximum aperture.
- Check your camera's battery life and memory card space before shooting.
- Scout your shooting location and assess the available light conditions.

Assignment Tasks

1. Capture a portrait using f/2.8, 1/125s, ISO 200 in aperture priority mode to achieve a soft background focus.
2. Photograph a moving subject at f/4, 1/500s, 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 a broad depth of field.
4. Take a night scene with f/2.8, 1/30s, ISO 1600 in manual mode to explore low-light performance.
5. Create a high-contrast image at f/5.6, 1/250s, ISO 800 in aperture priority mode to emphasize texture.
6. Document a busy street scene at f/8, 1/125s, ISO 400 in shutter priority mode to capture both motion and detail.

Stretch Tasks

- Experiment with long exposure photography by setting your camera to f/16, 30s, ISO 100 to create smooth water effects.
- Create a time-lapse sequence by shooting at f/8, 1/500s, ISO 200, adjusting settings as light changes throughout the day.



DO / DON'T

DO

- ✓ Do adjust your settings based on lighting conditions and desired effects.
- ✓ Do use a tripod for long exposures to prevent camera shake.
- ✓ Do regularly check your histogram to avoid clipped highlights and shadows.
- ✓ Do practice shooting in different modes to understand their effects on exposure.
- ✓ Do take multiple shots of the same scene with varying settings to see the differences.

DON'T

- ✗ Don't rely solely on automatic settings; learn to control exposure manually.
- ✗ Don't ignore the impact of ISO on image quality; higher ISOs can introduce noise.
- ✗ Don't forget to use the right metering mode for your scene; it can drastically affect exposure.
- ✗ Don't assume all scenes require the same exposure settings; adjust for each situation.
- ✗ Don't overlook the importance of lighting direction and quality in your exposure decisions.

Reflection Questions

- How does changing one element of the exposure triangle affect the others?
- What challenges did you face while trying to achieve proper exposure?
- In what situations do you find yourself adjusting ISO more frequently?
- How can understanding the exposure triangle improve your overall photography skills?

Technical & Creative Focus

Technical:

- Use spot metering to measure exposure based on the most critical part of your scene. Set your camera to spot metering mode, shoot at f/4, 1/250s, ISO 200.
- Employ exposure compensation to adjust brightness. For example, set your camera to aperture priority mode at f/5.6, and dial in +1 EV compensation for brighter images.
- Utilize the histogram to verify correct exposure. Shoot at f/8, 1/60s, ISO 400, and check the histogram to ensure it is not clipped on either end.
- Switch between aperture and shutter priority modes to understand their impact on exposure. For instance, use shutter priority at 1/500s, f/4, ISO 100 for fast-moving subjects.
- Practice bracketing your exposures by taking a series of shots at different exposures: f/2.8, 1/125s, ISO 800; f/4, 1/125s, ISO 800; f/5.6, 1/125s, ISO 800.

Creative:

- Experiment with shallow depth of field by shooting at f/1.8 to create a blurred background effect.
- Capture motion blur by using a slow shutter speed of 1/15s at f/8, ISO 100 to convey movement in your images.
- Use high ISO settings (ISO 1600 or higher) in low-light conditions to maintain a fast shutter speed while avoiding camera shake.
- Explore silhouettes by shooting against a bright background at f/11, 1/500s, ISO 200 to create dramatic contrasts.
- Play with natural light by shooting during golden hour at f/2.8, 1/200s, ISO 400 to achieve warm tones and soft shadows.