



## Overview

This photography assignment focuses on mastering shutter speed to capture motion effectively. By understanding how to manipulate shutter speed, photographers can either freeze fast action or create dynamic motion blur, enhancing their storytelling through imagery.

## Learning Objectives

- Understand the relationship between shutter speed and motion in photography.
- Learn to select appropriate shutter speeds for different types of motion.
- Experiment with creative techniques involving shutter speed to enhance photographic expression.

## Related Reading

Before you start, read these related blog posts to deepen your understanding:

[What Is Shutter Speed](#)

## Before You Shoot

- Choose a location with varied motion, such as a busy street or a park with moving subjects.
- Familiarize yourself with your camera's manual mode to control shutter speed, aperture, and ISO.
- Prepare a tripod or stabilizer for longer exposure shots to prevent unintended camera shake.
- Ensure your memory card has sufficient space and your battery is fully charged.
- Consider using ND filters for bright conditions to allow for slower shutter speeds.

## Assignment Tasks

1. Capture a moving car on a street using a shutter speed of 1/500s, aperture f/5.6, ISO 200 in shutter priority mode.
2. Photograph a cyclist in motion at a park with a shutter speed of 1/1000s, aperture f/4, ISO 400 in manual mode.
3. Create a motion blur effect of a running dog with a shutter speed of 1/60s, aperture f/8, ISO 800 in aperture priority mode.
4. Shoot a waterfall to convey motion using a shutter speed of 1/2s, aperture f/11, ISO 100 in manual mode.
5. Capture a dancer in motion with a shutter speed of 1/250s, aperture f/5.6, ISO 400 in manual mode.
6. Experiment with intentional camera movement (ICM) while capturing trees swaying in the wind at a shutter speed of 1/4s, aperture f/8, ISO 200 in manual mode.

## Stretch Tasks

- Create a time-lapse sequence of a sunset using long exposure shots at intervals of 1s with an aperture of f/11 and ISO 100.
- Photograph a busy intersection at night using a long exposure of 10s, aperture f/8, ISO 200 to capture light trails from vehicles.



## DO / DON'T

### DO

- ✓ Do experiment with different shutter speeds to see their effects on motion.
- ✓ Do use a tripod for long exposures to avoid camera shake.
- ✓ Do adjust your ISO according to light conditions to maintain proper exposure.
- ✓ Do practice panning techniques to master motion capture.
- ✓ Do review your images and adjust settings based on the results to improve.

### DON'T

- ✗ Don't use too slow a shutter speed without a tripod, as it will lead to unwanted blur.
- ✗ Don't rely solely on auto mode; manual settings give you more control over motion effects.
- ✗ Don't forget to check your histogram to ensure proper exposure.
- ✗ Don't ignore the impact of lighting conditions on your shutter speed choices.
- ✗ Don't hesitate to experiment with unconventional techniques to capture unique motion.

## Reflection Questions

- How did varying shutter speeds affect your perception of motion in your images?
- What challenges did you face when trying to capture motion blur or freeze action?
- Which techniques did you find most effective for conveying motion in your photography?
- How does understanding shutter speed enhance your overall photographic skills?

## Technical & Creative Focus

### Technical:

- Set your camera to manual mode to have full control over shutter speed, aperture, and ISO.
- For freezing motion, use a shutter speed of 1/1000s, aperture at f/4, ISO 200, and set white balance to daylight.
- To capture motion blur of a moving subject, try a shutter speed of 1/30s, aperture at f/8, ISO 400, and use matrix metering.
- For intentional camera movement (ICM), set your shutter speed to 1/15s, aperture at f/5.6, ISO 100, and use manual focus.
- When shooting at night or in low light, use a shutter speed of 2s, aperture at f/2.8, ISO 800, and set white balance to tungsten.

### Creative:

- Experiment with panning techniques by moving your camera in the direction of a moving subject while using a slower shutter speed.
- Try capturing light trails by using a long exposure (e.g., 5s) while panning your camera to create dynamic effects.
- Utilize zoom burst techniques by zooming in or out during a long exposure to create a sense of motion.
- Incorporate foreground elements in motion blur to add depth and context to your images.
- Use reflections in water or glass surfaces to enhance the motion effect in your photographs.