



## Overview

This photography assignment focuses on mastering shutter speed to control motion in your images. By understanding how to manipulate shutter speed, you can either freeze fast-moving subjects or create artistic motion blur, enhancing the storytelling aspect of your photography.

## Learning Objectives

- Understand the relationship between shutter speed and motion capture.
- Learn to apply different shutter speeds to achieve desired effects in photography.
- Gain proficiency in adjusting camera settings for optimal exposure while capturing movement.

## Related Reading

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

[What Is Shutter Speed](#)

## Before You Shoot

- Select a location with dynamic movement, such as a busy street or a sports field.
- Ensure your camera battery is fully charged and your memory card has sufficient space.
- Familiarize yourself with your camera's shutter speed settings and modes.
- Choose appropriate lenses based on your subject and desired perspective.
- Consider the lighting conditions and time of day for optimal shutter speed settings.

## Assignment Tasks

1. Photograph a cyclist racing past you at f/5.6, 1/1000s, ISO 200 in shutter priority mode to freeze their motion.
2. Capture a waterfall with a slow shutter speed of f/8, 1/2s, ISO 100 in manual mode to create a silky water effect.
3. Shoot a moving train at f/4, 1/500s, ISO 400 in aperture priority mode to freeze the train while blurring the background.
4. Use a shutter speed of 1/30s at f/3.2, ISO 800 in manual mode to capture a street performer with motion blur.
5. Photograph a busy street scene at f/11, 1/4s, ISO 100 in manual mode to show light trails from passing cars.
6. Capture a soccer player kicking a ball at f/2.8, 1/2000s, ISO 400 in shutter priority mode to freeze the action.

## Stretch Tasks

- Create an abstract image using ICM by moving the camera vertically during a 1s exposure at f/16, ISO 100.
- Shoot a time-lapse sequence of a sunset with varying shutter speeds to capture the changing light and motion.



## DO / DON'T

DO	DON'T
<ul style="list-style-type: none"><li>✓ Do practice with different shutter speeds to see how they affect motion.</li><li>✓ Do use a tripod for long exposure shots to maintain stability.</li><li>✓ Do experiment with different focal lengths to alter the perception of speed.</li><li>✓ Do adjust your ISO settings to compensate for changing light conditions.</li><li>✓ Do review your images and make adjustments based on the results.</li></ul>	<ul style="list-style-type: none"><li>✗ Don't use too slow of a shutter speed without a tripod, as it may result in unwanted blur.</li><li>✗ Don't forget to set your white balance according to the lighting conditions.</li><li>✗ Don't shoot in automatic mode if you want full control over your shutter speed.</li><li>✗ Don't neglect to check your histogram to ensure proper exposure.</li><li>✗ Don't be afraid to experiment; some of the best shots come from unexpected settings.</li></ul>

## Reflection Questions

- How did changing shutter speed affect the way motion was captured in your images?
- What challenges did you face when trying to freeze or blur motion?
- Which techniques did you find most effective for conveying movement?
- How might you apply your understanding of shutter speed in future photography projects?

## Technical & Creative Focus

### Technical:

- Use a fast shutter speed of 1/1000s at f/4, ISO 200 in shutter priority mode to freeze motion of a running athlete.
- Set a slow shutter speed of 1/4s at f/8, ISO 100 in manual mode to capture light trails from moving vehicles.
- Employ a shutter speed of 1/30s at f/5.6, ISO 800 in aperture priority mode to create motion blur while panning with a moving subject.
- Adjust shutter speed to 1/60s at f/3.5, ISO 400 in program mode to capture a dancer in motion with some blur.
- Utilize a shutter speed of 2s at f/11, ISO 100 in manual mode to create a smooth blur effect in waterfall photography.

### Creative:

- Experiment with intentional camera movement (ICM) by moving your camera during a long exposure to create abstract images.
- Try zooming in or out while shooting at a slow shutter speed to create a dynamic sense of motion in your photographs.
- Capture subjects in motion against a stationary background to emphasize speed and action.
- Use silhouettes against a sunset backdrop with a fast shutter speed to create dramatic imagery.
- Combine multiple exposures in post-processing to showcase different stages of motion in a single frame.